

BRITISH
BIRDS
• AND •
THEIR
EGGS



J. MACLAIR
BORASTON
• • •

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Plate I.



JACKDAW.

ROOK.

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Birds

BRITISH BIRDS & THEIR EGGS

WITH A NEW METHOD OF IDENTIFICATION

By

^(ohn)
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WITH 136 COLOURED ILLUSTRATIONS



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PREFACE.

THIS book has been written with the exclusively practical object of enabling persons unacquainted with British birds to identify them by their most obvious characteristics. Handbooks hitherto designed for this purpose have, by classifying the birds according to genera and species, or by arranging them merely in alphabetical order, failed to meet this need. For it is obvious that a beginner who wishes to identify a bird he has observed for the first time, and therefore one of which he does not know the name, cannot turn up the description of it by the aid of an alphabetical list. Nor can he be expected to know where to turn to find it in a book wherein birds are grouped according to generic distinctions, about which as yet he knows nothing!

The observations of beginners relate to broad distinctions of colour and markings, then to peculiarities in the gestures and notes of birds, and so on, and it is only by seeking to see birds with the eye of a beginner that one can assist him to the knowledge of what he does not know, as a natural development from what he himself may observe with no other equipment than his own eyes. Any other method involves an attempt to explain the unknown by what is equally unknown.

The grouping of birds under such headings as 'Black-and-White Birds,' 'Ruddy-Breasted Birds,' 'Trunk-Climbing Birds,' &c., as are here used, has the obvious merit of presenting birds to the beginner as he himself sees them. When, as in the case of the Bullfinch, a bird might be sought under two headings—in this case 'Black-Capped Birds' and 'Ruddy-Breasted Birds'—cross-references direct the student to that group in which it has been deemed best that the description of it should appear.

Where necessary, notes are appended to the descriptions, indicating those birds with which the one described is most

likely to be confounded, and the chief characteristics by which it is to be distinguished from them.

To the pseudo-scientific objection that such groupings do not accentuate the natural affinities existing between birds, it may be replied that such natural affinities, in order to be of any practical value, must be seen first, not in books, but in the birds themselves; and that, whilst the scientific grouping of birds has to do mainly with their internal, and therefore unseen, parts, the pictorial principle upon which they are arranged in this book presents them as they present themselves to the eye of the beholder, whose first need is to be able to identify a bird according to its external appearance, so as to become acquainted with the birds themselves, ere passing on to the study of their less obvious relationship one to another.

In order that an observer, having identified a bird, may see in what relationship it stands to other birds, a list of British birds grouped in the usual scientific order is placed at the end of this volume.

The scientific terms usually employed to denote the various parts of a bird's plumage have been entirely avoided, and the plain terms of ordinary language used instead. Still, in order that the student may find no difficulty in passing from this work to the use of a more technical one, the usual ornithological terms have been enumerated and illustrated by diagram at page x.

Before proceeding to observe birds, the user of this book need do no more than read through the list of Group-Headings appearing on page v.

The use of a field-glass is recommended, preferably one magnifying two to three diameters, so as to secure a bright image with a broad field.

Illustrations of the eggs of *all* British-breeding birds appear in the sixteen plates devoted to this part of the subject, and all have been drawn and coloured from the shell.

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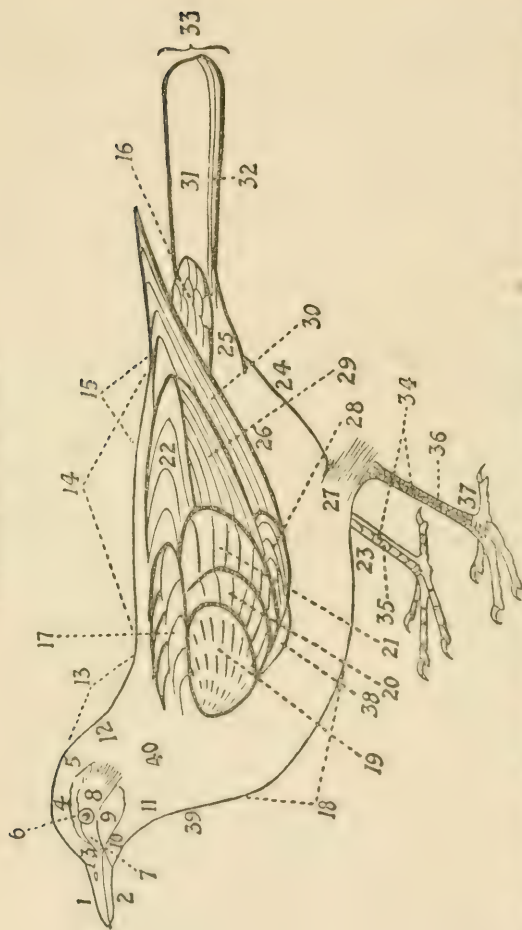
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DIAGRAM OF BIRD.



1. Upper mandible. 2. Lower mandible. 3. Forehead. 4. Crown. 5. Hind-head or occiput. 6. Supercilium. 7. Lore.
8. Ear-coverts. 9. Cheek. 10. Chin. 11. Throat. 12. Nape. 13. Hind-neck. 14. Back. 15. Rump. 16. Upper tail-coverts.
17. Scapulars. 18. Breast. 19. Small wing-coverts. 20. Median wing-coverts. 21. Great wing-coverts. 22. Tertiaries.
23. Abdomen. 24. Vent. 25. Under tail-coverts. 26. Flank. 27. Thigh. 28. Primary coverts. 29. Secondaries. 30. Primaries.
31. Central tail-feathers. 32. Lateral or outer tail-feathers. 33. Tail-feathers or rectrices. 34. Tarsi. 35. Scutellated tarsus.
36. Reticulated tarsus. 37. Hind-toe or hallux. 38. Winglet. 39. Fore-neck. 40. Side of neck.

BRITISH BIRDS AND THEIR EGGS.

BLACK BIRDS.

ROOK.—Plate 1. Length,* 19 inches. Plumage entirely black with lustrous sheen; bill and legs also black; at the base of the bill a patch of naked, scurvy skin, grayish-white, this patch being feathered in young birds until their second moult. Resident.

Eggs.—3 to 5, bluish-green, blotched with olive-brown; 1.6×1.15 inch (plate 121).

Nest.—Of twigs and turf, lined with roots and straw, and placed usually in high trees.

Distribution.—Common throughout the British Isles, though less so in Scotland than in England and Ireland.

The Rook is a walking bird, and proceeds with a waddling gait, hopping only when in a hurry or when it cannot stride a gap. The cry is a raucous '*Caw!*' Rooks nest in colonies in high trees, mostly elms, and feed in flocks in the fields. In keeping with its omnivorous habits, however, the bird may be found feeding on the seashore. During autumn and winter Jackdaws and Starlings associate with Rooks in their feeding-grounds; when disturbed the Jackdaws fly

* Measurements of length throughout this book are from the tip of the bill to the end of the tail.

with the Rooks, but the Starlings in a separate body. Out of the breeding season Rooks retire at sundown to roost together in large communities.

RAVEN—24 inches; has long, loosely hanging feathers at the throat.

JACKDAW—14 inches; shorter bill, and gray nape.

CARRION CROW—19 inches. Usually solitary or in pairs.

HOODED CROW—19 inches; body gray.

CHOUGH—16 inches; red bill and feet.

None of these birds has the patch of naked grayish-white skin at the base of the bill as in the Rook.

RAVEN.—Form, resembling the Hooded Crow (plate 8). Length, 24 inches, and therefore the largest of the Crow tribe. Plumage entirely black and lustrous; bill black and massive, closely feathered up to the base; feet also black; long, loosely hanging feathers at the throat forming the so-called 'hackles.' Resident.

Eggs.—3-5, or more, greenish-blue, blotched with olive-brown; 1.9×1.32 inch (plate 121).

Nest.—Of sticks, heather, &c., lined with wool, fur, and hair, and placed on cliffs or in trees.

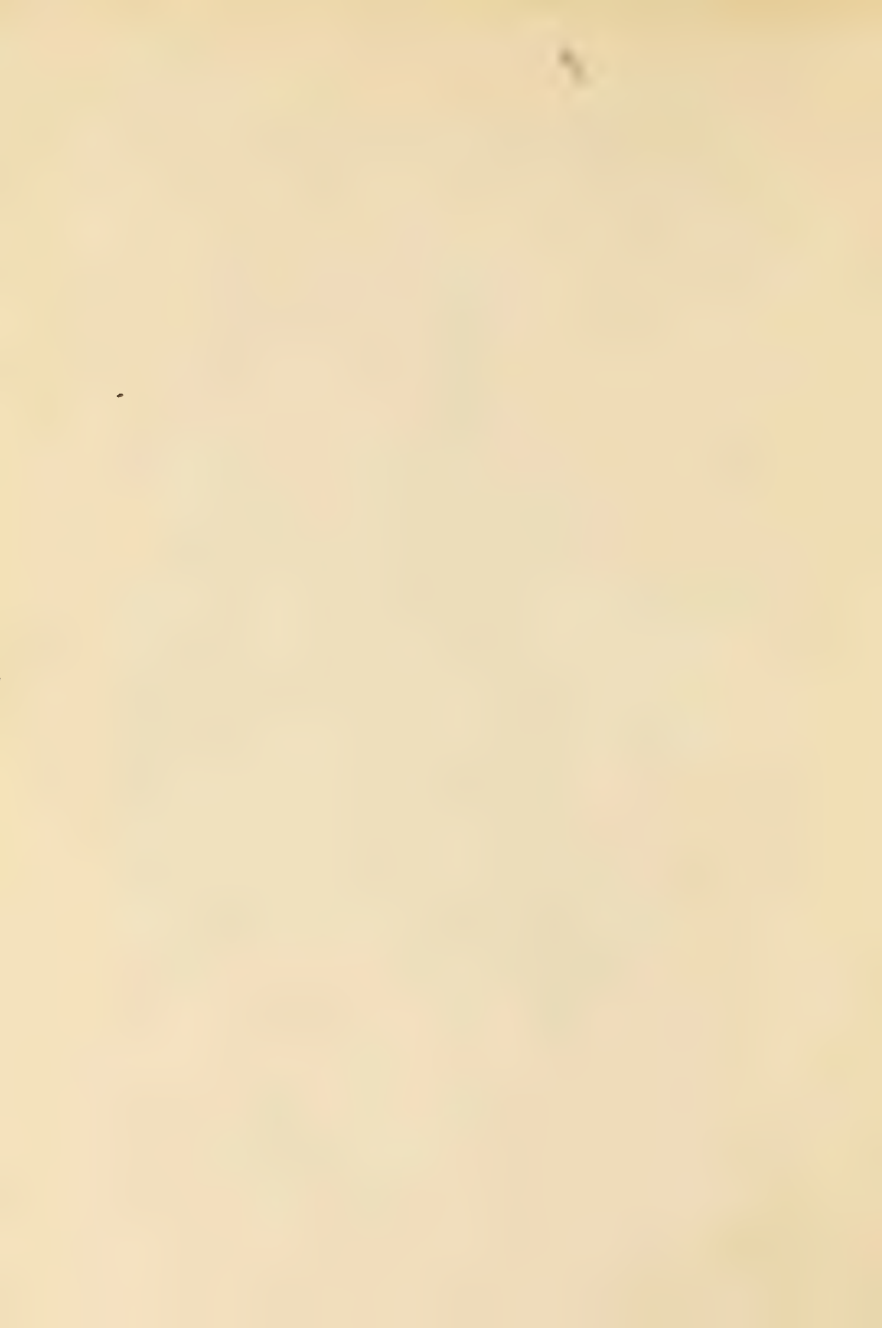
Distribution.—High cliffs of the south coast of England, North Devon and Welsh coasts, Scotch coast and the Scottish Islands, and in the wilder parts of Ireland; also inland in hill-country. Rare everywhere.

Like all the Crows a walking bird, hopping exceptionally. When disturbed it rises with effort, flying with slow, heavy wing-stroke. Ravens nest in solitary pairs on the high cliffs, and at times in trees in









the wilder hill-country inland. It is in such neighbourhoods that they are mostly seen, feeding on garbage cast up by the sea, soaring high up in air, disporting themselves in flight before the cliff-face, or ranging inland for eggs, young birds, ground vermin or carrion, and even attacking lambs and weakly sheep. The birds go usually alone or in pairs, and the cry is a deep, hoarse croak.

ROOK—19 inches ; whitish featherless tract at base of bill.

JACKDAW—14 inches ; bill short ; nape gray.

CARRION CROW—19 inches ; like a *smaller* Raven.

HOODED CROW—19 inches ; body ash-gray.

CHOUGH—16 inches ; red bill and feet.

None of these birds has the conspicuous loosely hanging feathers at the throat present in the Raven.

CARRION CROW.—Form, like the Hooded Crow (plate 8). Length, 19 inches. Plumage entirely lustrous black ; bill and legs also black. Resident.

Eggs.—4–5, bluish-green, blotched and spotted with olive-brown ; $1\cdot7 \times 1\cdot2$ inch (plate 121).

Nest.—With a large base of sticks and twigs, lined with wool and hair, placed on cliffs or in trees.

Distribution.—Southern England and Wales, Lake District and Cheviots, Scotland as far north as Perthshire ; very rare in Ireland. Large autumn migration from Continent to east coast of Great Britain.

The Carrion Crow goes usually alone or in pairs, though at times the bird packs to feed and roost like Rooks. Unlike the Rook, however, which has a whitish face-patch, the Carrion Crow has the face

feathered closely up to the bill. Its cry is harsher than a Rook's '*Caw!*' and may be written '*Caar!*' The Carrion Crow nests in high trees or on cliffs, rarely in a bush or on the ground. It is omnivorous, packing at times with Rooks and Jackdaws to grub the fields, purloining eggs and young birds, and is as much at home demolishing walnuts in an orchard as in stalking solemnly at the tide-line in search of any animal matter cast up by the sea. The Hooded Crow is held to be a variety of this bird, and their areas of distribution are complementary, interbreeding taking place where they overlap.

ROOK—19 inches ; featherless patch at base of bill.

RAVEN—24 inches ; like a *large* Carrion Crow.

HOODED CROW—19 inches ; body ash-gray.

CHOUGH—16 inches ; red bill and legs.

JACKDAW—14 inches ; nape gray.

CHOUGH.—Plate 2. Length, 16 inches. Plumage entirely glossy black ; bill long, slender, curving downwards, and, like the legs and feet, bright red. Resident.

Eggs.—3–5, grayish or yellowish white, spotted and blotched with gray and pale brown ; 1.5 × 1.1 inch (plate 121).

Nest.—Of sticks and twigs, lined with wool and hair, and placed in holes in cliffs.

Distribution.—Coast cliffs, Dorset to Cornwall ; Lundy Island ; coast cliffs of Wales ; Isle of Man ; Inner Hebrides ; coast cliffs of Ireland. Formerly bred inland in mountainous parts ; now much diminished in numbers.

The Chough is the *only bird with plumage entirely black and possessing bright-red bill and feet*, and though in young birds these are orange, even so, taken in conjunction with the black plumage, they remain the infallible distinguishing marks of the Chough. In its habits and vivacious temperament this bird closely resembles the Jackdaw, with which it often associates in its nesting quarters and feeding resorts. It nests in colonies in holes in high cliffs, has a note distinctly akin to the high, querulous, and somewhat nasal 'Ä-āw!' of the Jackdaw, and further resembles the Jackdaw in performing concerted aerial evolutions with its fellows or in company with Jackdaws, during which it indulges in the 'tumbling' antics common with Jackdaws and Rooks. The Chough feeds in flocks in inland fields and pastures, and searches the shore for animal matter flung up by the sea, moving about with a short, rapid, running motion often seen in the Magpie.

ROOK—19 inches; whitish patch at base of bill.

JACKDAW—14 inches; short bill; gray nape.

CARRION CROW—19 inches.

HOODED CROW—19 inches; body ash-gray.

RAVEN—24 inches; long feathers at throat.

All these birds have dark bills and feet.

JACKDAW. — Plate 1. Length, 14 inches. Black, with a bluish gloss above, dull black below, but nape and sides of neck from behind the eye gray; bill, legs, and feet black; eyes white. Resident.

Eggs.—4—6, pale greenish-blue, spotted and blotched with dark brown, olive-brown, and gray; 1.4 × 1.0 inch (plate 121).

Nest.—Of sticks, straw, hay, and leaves, lined with wool, fur, &c., and placed in holes in cliffs, castles, church towers, and trees, and openly in trees.

Distribution.—General.

The Jackdaw when flying has a quicker wing-stroke than the larger members of the Crow family, is more vivacious in its movements, and much given to 'tumbling' antics on the wing. Its cry is a highly pitched, querulous 'Ä-āw!' with a somewhat nasal twang, to which, being a very loquacious bird, it gives frequent utterance. The Jackdaw is gregarious, nesting in colonies in trees, ruins, church towers, holes in high cliffs, and sometimes in rabbit-burrows. It may often be seen with Rooks when feeding in the fields and in their evening sports on the wing, also roosting with them out of the breeding season. It may be met with feeding on the shore in the company of Gulls.

ROOK—19 inches ; whitish tract at base of bill.

RAVEN—24 inches ; long feathers at throat.

CARRION CROW—19 inches.

HOODED CROW—19 inches ; body ash-gray.

CHOUGH—16 inches ; red bill and feet.

None of these birds has the gray nape of the Jackdaw, or so short a bill.

BLACKBIRD. — Plate 3. Length, 10 inches. Plumage entirely black, glossy ; bill rather long, pointed, bright yellow. *Female* : dull brown, sometimes hoary on breast ; bill also brown. Resident.



STARLING.



CORMORANT.



Eggs.—4-6, greenish-blue, spotted, streaked and blotched with pale reddish-brown, but sometimes clouded heavily with orange-brown at the larger end; $1.1 \times .85$ inch (plate 121).

Nest.—Of rootlets, coarse grass, plastered with mud, lined with fine grass, and placed usually in hedges and holly-bushes.

Distribution.—General.

The Blackbird is the *only bird with plumage entirely black which habitually hops*. It is a skulking bird of the woodside, hedgerow, and shrubbery, but best observed as a winter visitor to our gardens. It then sneaks through fence or hedge-bottom, and hops out on to the grass, tacking erratically to right and left, and at each pause posing with head attentively aslant and plumage tightly dressed. The object of its search is generally a worm, which the bird shakes vigorously ere bolting it whole. If seen in the act of alighting, the Blackbird may be identified by the manner in which the long, elegant tail is thrown upwards, as if the bird were overbalanced by it. When detected in hiding, the Blackbird rushes out with a wild, cackling cry. It has another loud, more metallic cry, always to be heard when the bird is about to settle down for the night. It may be written '*Pick! pick! pick!*' and is sometimes repeated scores of times in succession. The flight is strong but low, and the bird usually hugs the ground or a hedgerow for cover. The song, consisting partly of short repeated phrases, partly of a desultory warbling, is remarkable for the lethargic ease and smoothness with which it is de-

livered, and for the rich, flute-like quality of its tones. Blackbirds never flock together.

STARLING— $8\frac{1}{2}$ inches ; gregarious ; a walking bird ; light edgings to feathers ; without the long tail of the Blackbird.

RING-OUZEL—10 inches ; a bird of the hill-country, of a general black, and closely resembling the Blackbird in all its ways, but with a white crescent on the chest, and with grayish edges to the wing-feathers ; in autumn the body-feathers also have gray edges.

STARLING.—Plate 4. Length, $8\frac{1}{2}$ inches. Although the plumage appears to be entirely black at a moderate distance, a closer view reveals buff tips in the feathers of the upper parts, and after the autumn moult whitish tips in those of the under parts, besides at all times tracts where the black exhibits reflections of purple, green, or violet ; bill yellow ; legs and feet reddish-brown. Resident.

Eggs.—4–7, pale blue ; $1.2 \times .85$ inch (plate 121).

Nest.—An untidy mass of straw, hay, twigs, and moss, lined with some wool and feathers, and placed in cavities in trees, banks, walls, beneath the eaves of houses, &c.

Distribution.—General.

The Starling is the smallest walking bird with black plumage. It has a stout, thick-set appearance, and the legs, being set widely apart, cause it to walk with a shambling gait, in which it resembles the Rook. The Rook, however, redeems himself by his grave deportment ; the Starling, on the contrary, is always in a hurry, and runs about with the awkward gait of

a bandy-legged person. It builds in holes in trees, banks, walls, and beneath the eaves of houses, and is frequently to be seen perching on chimney-pots and gables, emitting eccentric notes more varied than those of almost any other bird. It has no song properly so called, but gives vent by turns to a long-drawn whistle, hard cracking sounds, and other wheezy, wiry, chuckling, and gurgling notes. When the bird perches, the wings often droop low at its sides. The Starling is highly gregarious, and after breeding cares are over the birds pack, consorting with Rooks and Jackdaws or Lapwings to grub the fields. The flight is marked by alternate spells of rapid vibration of the wings and of sustained skimming, during which the wings are laid out flat. When in packs Starlings use an orderly wheeling flight, especially in their evening exercises in the air ere resorting to the general roosting-place. A common winter visitor to gardens, where it renders itself conspicuous by ceaseless sparring with its fellows over the scraps. In autumn Starlings may be seen catching flies on the wing, reminding one of Swallows. Their winter concerts at the tops of bare trees are of common note.

BLACKBIRD—10 inches; a hopping bird; tail $3\frac{1}{2}$ inches, against a Starling's $2\frac{1}{2}$, and frequently elevated.

CORMORANT.—Plate 5. Length, 3 feet. Entirely black, except the back, which is bronze-brown and has black edges to the feathers; white throat (and, during the breeding season only, white patch on thigh and white filamentous feathers on the head); feet black, webbed, and, being set far back,

cause the bird to assume a more or less erect posture when standing; bill long, straight, hooked at end, brownish; eyes green; gular pouch yellow. Resident.

Eggs.—3-5, rough, chalky-white outside, the sub-surface being pale blue; 2.75×1.6 inches (plate 122).

Nest.—Of sticks, coarse grasses, and seaweed, pyramidal in form, and placed on ledges of rock.

Distribution.—General around our coasts.

The Cormorant is somewhat duck-like in form, but has a very long, slender bill and long, spreading tail. The birds breed in colonies on cliffs or rocky islands, though in some parts the nest is placed in a tree near an inland lake. Occasionally frequenting the seashore and mud flats, the Cormorant is usually a deep-water feeder, and when floating on the water the body is in large part submerged, only the top of the back and the neck and head being visible. When it dives, the Cormorant springs up and goes down head foremost, remaining and travelling under water for about half-a-minute ere rising to swallow any fish it may have captured. It rises heavily from the sea, but afterwards, with long, outstretched neck and rapid wing-stroke, forges strongly ahead, generally flying low to the water. If there are more than one bird, they proceed one behind another in close file. The Cormorant has the habit of standing for long periods motionless with outspread wings, either on the shore or on some solitary snag of rock in the sea.



Plate 6.



MOORHEN.

Plate 7.



c *

COOT.

The young birds are of a generally warm brown plumage, and 'lanky' in form.

SHAG—27 inches; greenish-black; no white throat or thigh patch; the back dark green, with black edgings to the feathers.

SHAG.—Form, like the Cormorant (plate 5). Length, 27 inches. Crown, neck, under parts, and back dark green, the feathers of the last edged with black; wings, tail, legs, and (webbed) feet black; bill black, yellowish below and about gape; a forward-curving crest on the forehead from January to May. Resident.

Eggs.—3-4, like those of the Cormorant in colour and texture, but smaller (plate 122).

Nest.—Also like that of the Cormorant.

Distribution.—At certain places on the coast cliffs and boulder-strewn shores of Great Britain and Ireland.

The Shag, or Green Cormorant, is indistinguishable from the Cormorant proper when seen at a distance, being in its form, general blackness, gestures, and flight, to all appearances, the same. Nearer inspection, however, shows the black to be of a pronounced greenish cast, the bird itself notably smaller, and without the bronze back and the white throat-patch of the larger bird. In its feeding and breeding habits also the Shag closely resembles the Cormorant, but shows a marked preference for caves as breeding-sites where such are available. During the time that the Cormorant has the nuptial white patch on the thighs this serves as a further distinguishing mark, the Shag at no time having such an ornament.

MOORHEN. — Plate 6. Length, 13 inches. General colour dark brown above and dark gray below, with the sides of the body streaked white, and a white patch beneath the tail; bill and a bare bony plate on the forehead red, the bill yellow at the tip; legs greenish; toes very long. Resident.

Eggs. — 7-9, or more, pale buff, spotted and blotched with reddish-brown; 1.65×1.2 inch (plate 122).

Nest. — Of sedge, reed-flags, at times of dead leaves, placed on the ground in swampy places or on branches over water.

Distribution. — General.

The Moorhen is not, as its name might suggest, a moor bird, but a fresh-water one, whether this be in the form of pond, lake, or stream. When seen swimming, nodding its head as it goes, it will remind the observer of a small duck; in its habit of diving, too, it is duck-like, but when diving for safety it will remain concealed beneath the water for an indefinite time, holding itself down by the underwater growth in the shallows, its bill alone being held at the surface. When seen walking about the banks in search of worms, &c., it looks like a small common fowl; but if the difference in form be not observed, *the white tracts at the sides of the body and beneath the short, cocked tail* declare the Moorhen. It will mix with common fowls to feed in quiet places. The large nest, sometimes built upon marshy ground, is more often placed on a well-covered branch projecting over water, and slightly above the

surface of it, a quite small pond being frequently selected. The Moorhen has a mellow, musical note—‘*Croog!*’ It flies rarely, unless to cover for safety, and the flight is laboursome and performed with much splashing. Moorhens, although they will nest in the same places as Coots and other fresh-water birds, are of a solitary habit, even in winter.

COOT—15 inches. A bird of a generally black appearance, frequenting the same places as the Moorhen, and closely resembling it in its ways, but at once distinguishable from that bird by its light bill and the conspicuous white bony plate on its forehead. It lacks the white at the sides and beneath the tail.

DABCHICK—9½ inches; dark brown above, whitish below; chest chestnut; bill dark. Frequenting similar waters, it goes less to land than the Moorhen, and when swimming, with neck drawn in, looks like a tiny duck. On land it drags itself along rather than walks.

COOT.—Plate 7. Length, 15 inches. Slaty-gray above, sooty-black below; a bony plate on the forehead conspicuously white; bill pinkish-white; legs greenish-gray; a thin white bar across the wing. Resident.

Eggs.—7–10, stone-colour, minutely spotted all over with dark brown, with larger spots of the same colour interspersed; 2.0 × 1.5 inches (plate 122).

Nest.—Of flags, sedges, reeds, and rushes, placed among reeds or on a tuft of rushes about the margins of lakes, ponds, and rivers.

Distribution.—General.

The Coot in its general appearance is so like a Moorhen that it is fortunate the bird has a sign set in its forehead—a white bony plate visible at a long distance—which enables it to be at once distinguished. For the rest, it is a dull, blackish-looking bird, frequenting lakes and the larger sheets of fresh-water, where it spends its time in diving to bring up aquatic plants to be overhauled at the surface. It goes little to land, unless it be to preen its plumage, and has none of the staid grace with which the Moorhen steps quietly about the water-side in search of food. The nest is placed in reed-beds or upon some well-covered branch stretching out over water and close to it. The Coot rarely flies unless disturbed, or to chase another Coot. It rises from the water with difficulty and great splashing, trailing its legs along the surface, as it goes with hollow, hanging wings, ere it drops again with a heavy splash, as if unable gradually to arrest its flight. The note is a high, clear '*Howk!*' given singly. When seen swimming with nodding head, or diving, the Coot at a distance might be mistaken for a duck; but there is *no all black duck with broad, white frontal patch*. When frozen out of its fresh-water haunts the Coot goes to the coast, where it feeds on the mud flats. In winter Coots associate, often in large bodies, on inland waters, and may be seen cropping the grass like geese.

MOORHEN—13 inches; of a general dingy blackish colour, but with conspicuous red frontal plate and base to bill, and with white at the sides of the body and beneath the tail. Note, a musical '*Croog!*'

DABCHICK—9½ inches; frequenting similar places and of a generally dark appearance, but very much smaller.



HOODED CROW.

Plate 9.



MAGPIE.



NOTES TO 'BLACK BIRDS.'

SCOTER.—This duck, although entirely black, is described with the other ducks under 'DIVING DUCKS,' the fact that it is a duck being as evident as the blackness of its plumage.

SWIFT.—As this bird, because of its usually high and rapid flight, is more likely to be recognised as 'Swallow-like' in form than as a bird of black plumage, it has been described under 'SWALLOW AND SWALLOW-LIKE BIRDS.'

BLACK-AND-GRAY BIRDS.

HOODED CROW.—Plate 8. Length, 19 inches. Head, throat, wings, and tail glossy black, but readily distinguished from all other members of the Crow family by its ash-gray back and under parts. Resident.

Eggs.—4-5, bluish-green, spotted and blotched with olive-brown, of the same size as those of the Carrion Crow, but sometimes rather longer (plate 121).

Nest.—Like that of the Carrion Crow, and placed on rocks inland or by the sea, or in tall trees.

Distribution.—Common in Ireland and Scotland ; less common in the Isle of Man ; rare in Wales. Large immigration from the Continent on our east coasts in autumn.

This bird is held to be a variety of the Carrion Crow, and its form, flight, cry, feeding, and nesting habits are the same. The areas of distribution of the two species are largely complementary, interbreeding taking place where they overlap.

JACKDAW—14 inches ; nape alone gray.

BLACK TERN.—Form, like Common Tern (plate 114), but tail only slightly forked. Length, 10 inches. Upper parts slate-gray ; tail paler, short for a Tern, and not deeply forked ; head, neck, and under parts

blackish, but white near the tail; bill black; legs and feet reddish-brown. Bird of passage.

The Black Tern, formerly breeding plentifully in England, is now only a bird of passage on the east coast at the seasons of migration, but in rough weather it may be driven inshore and appear on inland waters. Although fairly regular in its visits, it comes only in small numbers. In form it differs from the commonly known white Terns in its shorter and only slightly forked tail. The wings, however, are long, and are used with the measured stroke which gives to the flight of all Terns a wavering buoyancy, as if the body of the bird were too light for the length of wing and the depth of the wing-beat. In the Black Tern the under sides of the sharply bent wings show pale gray, which distinguishes it from other dark Terns which are rare stragglers to our shores; there is also a clear white tract below next to the root of the tail. This bird dives from the wing for surface fish as described under the Common Tern, but its diet includes also worms and larger insects. There is *no generally blackish bird that dives from the wing save the Black Tern.*

NOTE TO 'BLACK-AND-GRAY BIRDS.'

JACKDAW.—Should the Jackdaw—a black bird like a smallish Rook—be sought here because of its gray nape, refer to 'BLACK BIRDS,' the gray nape being more likely to be missed than observed by a beginner.

BLACK-AND-WHITE BIRDS.

MAGPIE.—Plate 9. Length, 18 inches. Head, neck, chest, and upper parts black; rump grayish-white; a large pure-white patch lying along each shoulder; a portion of each of the longer flight-feathers white, but visible only during flight; remaining under parts white; bill and legs black. Resident.

Eggs.—Usually 6, but sometimes more, pale bluish-green, closely spotted and speckled with olive-brown, with underlying blotches of faint gray; 1.4×1.0 inch (plate 121).

Nest.—Of sticks, on a foundation of turf and clay, and lined with fine roots and grass, the whole covered with a dome of thorny sticks, with an opening for passage in and out, and placed usually in a tall tree, in a fork next the trunk.

Distribution.—Irregularly distributed throughout Great Britain, rare in East Anglia, but common in and near Wales and in Ireland.

When the Magpie is seen flying, the short wings beat with recurring spasms of violent activity, and because of the inordinate length of the tail—more than half the total length of the bird itself—the wings appear to be set disproportionately far forward. The flight is extremely laboursome, and leaves the impression that the bird is being held back by some invisible thread attached to its long tail. The feathers of the latter are much graduated, the central ones



WATER-OUZEL (DIPPER).





PIED WAGTAIL.



being longest and the outermost ones shortest, those intervening being 'stepped' so as to give to the tail a wedge-like appearance. When about to alight the bird rises to its perch, and as it alights the long tail is shot up as with the Blackbird. When feeding on the ground, generally in pastures, the Magpie tacks hither and thither capriciously with a walking or running gait, at times striking its bill into the ground like a Rook, but at the same time throwing up its tail like a Blackbird. It resembles the Blackbird, too, in its habit of hugging the hedgerows when escaping. Its note is a low, mechanical, chattering sound like that of a rattle or the bleat of a goat. The Magpie nests in detached pairs, often in a high tree standing apart, the nest, a great globe of twigs, being placed usually near the top and in the line of the trunk. The birds, however, will play and chatter together in the trees in small companies, and during autumn and winter are to be met in bands of half-a-dozen or more flying and feeding together. *There is no bird comparable in size with the Magpie which combines with broadly figured black-and-white plumage the Magpie's inordinate length of tail.* It is a bird of the woodland, and of fields diversified by tree and hedgerow.

RING-OUZEL.—Form, like the Blackbird (plate 3). Length, 10 inches. Black, with gray edgings to the feathers; a bold white band across the throat; bill yellow, black at the tip; legs and feet black. Migrant.

Eggs.—4—5, like those of the Blackbird, but

more coarsely blotched with reddish-brown; $1.1 \times .85$ inch (plate 122).

Nest.—Like that of the Blackbird, of rootlets, coarse grass, plastered with mud, and lined with finer grass; placed in heather and ling, and on ledges in rocks and banks, also in low bushes.

Distribution.—In rugged hill-country throughout the British Isles.

The Ring-Ouzel, or 'Mountain-Blackbird,' well earns the latter denomination, in its size, shape, generally black plumage, long tail and yellow bill, flight, hopping gait, and gestures so closely resembling the Blackbird as easily to be confounded with it but for one obvious distinguishing mark—the broad white band at the throat. When viewed more nearly the sooty-black plumage is seen to be relieved by gray margins to the feathers. It is a bird of the hill-country, and rarely found nesting elsewhere, though it may be encountered in the lowlands when making its way to and from its nesting haunts at the spring and autumn migrations. Like the Blackbird, the Ring-Ouzel has the habit of throwing up and fanning its long tail when in the act of alighting. Its song, too, has in it something of the Blackbird's, but is more rugged and given with robuster energy. The nest may be placed among heather, but more often a niche in a rock, stone wall, bank of a stream, or similar support is selected. The birds return in April and depart in September, though some may linger in the lowlands until near the end of the year.

STARLING — $8\frac{1}{2}$ inches; gregarious; a walking bird; feather-edgings buff; no throat-band.

DIPPER.—Plate 10. Length, 7 inches. Upper parts dark brown; grayer on the back; throat and chest white; breast chestnut-brown; belly and flanks grayish-black; bill dark brown; legs and feet blackish-brown. Resident.

Eggs.—4-6, plain white, dull; $1.0 \times .75$ inch (plate 122).

Nest.—A large ball of grass, moss, and leaves, with a hole in the side, and lined with dead leaves; placed in a cavity near a waterfall, under the bridge of a stream or in the bank, sometimes on a branch over water.

Distribution.—General where mountain streams occur, descending to lowland water-courses and the seashore in winter.

Upon general inspection the Dipper, or 'Water-Ouzel,' will appear to be black and white, the chestnut of the breast easily escaping notice. In its form the Dipper is a remarkably close copy of the Common Wren. Although four times as bulky as the latter bird, and differing from it in its highly contrasted markings, there is the same compactness of figure, the same stumpy, often elevated tail, and the same short wings, whirring as they beat quickly in low flight. Its song, brilliant and vigorous, and to be heard even in autumn and winter, also recalls that of the Wren; and its nest, like the Wren's, is globular, with the opening at the side. Both birds are exclusively insectivorous. Because there is more than ordinary agreement between the two birds in the

respects mentioned, it is the stranger that there should exist even more extraordinary divergence in other respects. The smaller bird searches the chinks and crevices of the thicket for its insect-food; the larger, albeit equally formed for perching, dives into the mountain stream, and, propelling itself by a fin-like use of its wings, seeks a similar insect diet in the chinks and crevices of its stone-covered bed. Perched on a boulder, watching the moving water, the Dipper suggests the immobile Kingfisher rather than the restless Wren; the rapid flight along-stream also recalls the Kingfisher. But when the bird walks into or sinks beneath the water, advancing in jerks along or close to the bottom, and rising at times for a breathing-space to the surface before continuing its search, it has no parallel—it is the Dipper, *unique as a diving insect-hunter among British perching birds.*

RING-OUZEL—10 inches; a bird of the hills, but not necessarily of the hill streams; black, and like a Black-bird in form, with conspicuously long tail, but white gorget.

KINGFISHER—7½ inches; although a stream-haunter and diver, and resembling the Dipper in its thick-set form, its upper plumage is of a blazing blue, and the bill extremely large.

PIED WAGTAIL.—Plate 11. Length, 7½ inches, of which the tail alone measures half. Crown, collar, back, and tail black, but outermost feathers of the tail conspicuously white; wings black, but some of the feathers edged with white; forehead, sides of face,



SNOW-BUNTING.



PIED FLYCATCHER.



and under parts white; sides and flanks blackish. Back gray after autumn moult; always gray in female and marked irregularly with some black. Bill and legs black. Resident.

Eggs.—4-6, grayish-white, spotted all over with ash-colour beneath warmer brown speckles; $\cdot 8 \times \cdot 6$ inch (plate 121).

Nest.—Of dry grass, rootlets, and moss, lined with hair and feathers, and placed in a niche of a rock, wall, or bank, or in any similar recess in thatch, or a pile of wood or turf.

From the above description it will be seen that the plumage of the Pied Wagtail is entirely black and white, and that the markings are distributed in a highly variegated pattern. In summer the intensity of the contrast is such as to make the Pied Wagtail the most startlingly conspicuous of all the smaller birds. It is almost exclusively a ground-bird, frequenting the water-side and the adjoining meadows, where it often attends the cattle for the sake of the insects they disturb. It is a walking bird, running hither and thither abruptly with rapid gait, or starting up to catch a passing insect on the wing, but at every pause between its movements 'marking time,' as it were, by the ceaseless wagging of its long, elegant tail. Its flight is marked by a series of rapid wing-beats, after which, with wings laid back, the bird rises and sinks in a long, shallow curve, recovering itself by another series of rapid wing-beats, and so on. As it flies it cries, '*Tizit! tizit!*' *There is no other ground-feeding, long-tailed, walking bird entirely black and white except*

the Magpie, which is from two to three times as long as the Pied Wagtail.

YELLOW WAGTAIL—Olive above ; sulphur-yellow below.

GRAY WAGTAIL—Blue-gray above ; sulphur-yellow below.

WHITE WAGTAIL—Occurs on migration in spring and autumn. The black ceases at the nape, the back being clear gray. The back of the Pied species is gray in the female, but the gray is dingier, and irregularly streaked and blotched with black.

SNOW-BUNTING—7 inches ; a winter visitor in flocks to our eastern seaboard, of the form of a Chaffinch, therefore lacking the long tail and sharp bill of the Pied Wagtail ; the head and neck wholly white (save for an admixture of ruddy brown in the upper parts at this time), and therefore without the black cap and gorget of the Pied Wagtail ; a hopping bird, and in winter gregarious, whilst the Pied Wagtail walks, and associates little with others of its kind.

SNOW-BUNTING.—Plate 12. Length, 7 inches. The whole head, neck, and under parts white ; back black ; wings variegated with bold white and black tracts ; tail black in centre, outer feathers mostly white. Winter migrant.

Distribution.—An autumn migrant to the east coasts of England and Scotland ; a few birds have been found breeding on the higher mountains of the latter country.

Although the female is always a browner bird and the male in autumn gets a certain admixture of ruddy brown in the plumage of head and back, the Snow-Bunting is, with the exception of the Pied Wagtail, the only ground-feeding bird of approximately his own size whose plumage may be described generally as strikingly black and white. He differs from the

widely distributed and resident Pied Wagtail in being almost exclusively a winter visitant in flocks to our eastern seaboard, where he may be seen feeding on seeds on the coast lands, although he sometimes makes his way farther inland. He is of the form of a Chaffinch, and hops—in this contrasting with the Pied Wagtail, which walks and has an inordinately long and ceaselessly wagging tail. As the tail in the Pied Wagtail constitutes half its length, the Snow-Bunting, with its tail of normal size, is a much bulkier bird. The Snow-Bunting is in winter gregarious, but the Pied Wagtail associates little.

PIED FLYCATCHER.—Plate 13. Length, 5 inches. Upper parts black, except the forehead and a prominent patch on each wing, which are white, with a grayish-white band on the rump; tail black, but three outside feathers on each side largely white; cheeks and under parts also white; bill, legs, and feet black. Summer migrant.

Eggs.—6–9, pale plain blue, or exceptionally with a few minute spots of reddish-brown; $\cdot 68 \times \cdot 52$ inch (plate 122).

Nest.—Of dry grass and root-fibres, lined with hair, and placed in a roomy hole in an oak, preferably near the base; also in pollard-trees and exceptionally holes in walls.

Distribution.—Very local. Principally in Westmorland and Cumberland, parts of Wales and the English counties bordering it; rarer thence to Northumberland; rarer still in Scotland.

The Pied Flycatcher has the distinction of being the *smallest black-and-white* British bird. It is of a rather rotund, Chat-like build, frequenting the woodside, where it perches on a fence, some lower projecting branch, or in a similarly open situation, darting out to take insects on the wing, and returning to the same or a similar perch in the manner of the Common Flycatcher. Sometimes it goes to the ground to take an insect, but never remains there. When perching, the bird often holds its wings drooping, and rocks the rather short, bluntly forked tail slowly up and down. It is a very silent bird, only occasionally uttering a Chat-like 'Tuck!' The song is a weak warble. There is only one other bird with which, because of its similarly black-and-white markings, it might be confounded—the Pied Wagtail. But the latter is for the most part a bird of the water-side, takes its food on the ground, goes with a walking gait (the Pied Flycatcher hops), and has a long and ceaselessly wagging tail. It is, moreover, generally distributed throughout the British Isles, whilst the Pied Flycatcher is restricted to the areas mentioned above. Further, the female of the Pied Flycatcher is quite different in colouring from the male of her own species, being grayish-brown in the upper parts, and having the white of the lower parts sullied. Still, she has the white wing-patches and white in the outer tail-feathers of the male. The nest is always placed under cover, and I have found it in a natural cavity at the base of an oak. A further Chat-like quality in the Pied Flycatcher is that she lays plain blue eggs.

Plate 14.



LAPWING (FEEWIT).



OYSTER-CATCHER.

LAPWING.—Plate 14. Length, 12 inches. Crown, long recurved crest, fore-cheeks, throat, fore-neck, and upper breast greenish-black; sides of the face and sides of the neck white; upper parts deep green; under parts white; wing-feathers black; tail white, with broad black band at the end. Nearer inspection would reveal a brownish hind-neck, and fawny patches at the base of the tail; but the dark parts of the plumage are so dark, and both the dark and the white so broadly distributed, that the general impression received at a moderate distance is that of a black-and-white bird. Resident.

Eggs.—4, olive-green or stone-buff, with dark-brown blotches, trails, and spots, and a few underlying markings of gray; 1.6×1.3 inch (plate 122).

Nest.—Only a depression in the turf or fallow-land.

Distribution.—General throughout the British Islands.

During the breeding season the Lapwing, Peewit, or Green Plover, as it is variously named, is principally a bird of the moorland, nesting on the ground. It is a walking bird, moving with a rapid running gait, in the pauses of which it poses attentively, often on a slight eminence, sometimes standing motionless for prolonged periods. The bird has, however, fits of wild exhilaration, when it dashes up into the air, breaks back in a mad zigzag descent, and then scours along in low flight with humming wings, its loud '*Co-u-whee-whee!*' filling

the air. The wings are broad, and rounded at the ends, whence the heavy, flapping flight that has caused the bird to be called 'lap'-wing. When seen from below, the blunt wings exhibit pure-white under-surfaces, fringed on the outer sides by the black flight-feathers. After the breeding season Lapwings pack and descend in large bands to the ploughed fields and pastures, where they become conspicuous, especially towards evening, by forming up in a long, flickering line, and wheeling with beautifully regular evolutions above the fields. Out of the breeding season Lapwings also frequent estuaries and the seashore in large flocks, their numbers being greatly increased by accession of inland birds at times of frost. These bands break up at the middle of March. *The Lapwing is the only British bird with a long, upward-curling crest*, except the tiny Crested Titmouse, which is a perching bird. Among the winter bands of Lapwings Golden Plovers are sometimes present, but may be at once distinguished by their sharply pointed wings, rapid wing-stroke, and whistled '*Tlu-ee!*'

OYSTER-CATCHER. — Plate 15. Length, 16 inches. Head, neck, chest, and upper parts black, except lower half of back, which is white; wings black, broadly banded with white; tail black, but white at base; under parts white; long, straight, red bill; legs purply-red. Resident.

Eggs.—3, rarely 4, stone-buff, spotted and scrolled with dark brown, and having some underlying markings gray; 2.2×1.5 inches (plate 122).

Nest.—A depression in the shingle above high-water mark, usually with a few small stones and bits of shell as lining; on ledges of rocks bordering sand or shingle beaches; and in holes in turf inland from the rock-head.

Distribution.—Around the shores of the British Islands, and in Scotland on the banks of many of the larger rivers, particularly of the eastern side.

The Oyster-Catcher, or Sea-Pie, is as conspicuous as the Magpie in its boldly contrasting black-and-white plumage, but utterly different in every other respect. At high-water the bird is usually to be seen standing on the sea-washed rocks, the head drawn in between the shoulders giving it a strangely round-shouldered appearance. At ebb, however, small parties of the birds set off together to search the tide-line as the water falls, their approach being heralded by loud, metallic cries resembling to some extent the '*Pink!*' of the Blackbird, but much louder and more metallic. It is when on the wing that the Oyster-Catcher exhibits the striking pattern of its markings—the white tail broadly barred with black at the end, and the sharply pointed wings striped alternately with black and white, completing the strong contrast between the black of the head and upper parts and the white of the lower back and under parts. The Oyster-Catcher does not 'catch oysters,' but drags limpets and mussels from the rocks, forcing the shells open with its powerful bill. It goes with a walking gait and is a swift runner. When disturbed the birds circle out to sea, and return to the shore further on. This bird deposits its three,

sometimes four, large blotched eggs on the bare rock, or among the shingle a short distance above high-water mark, or in holes in the turf inshore. The Oyster-Catcher is the *only shore-bird combining with bold black-and-white plumage bright-red legs and a long, bright-red, straight bill.*

RAZORBILL.—Plate 16. Length, 17 inches. General colour of upper parts and throat black, the former with a greenish cast, the latter brownish; a narrow white transverse bar on the wings; under parts white; bill massive, black, shaped like a razor-head, and crossed centrally by a thin, white, curving line; a white line extending from the base of the upper mandible to the eye; legs and webbed feet blackish-brown. Resident.

Egg.—1, cream-white, blotched and spotted, and sometimes zoned, with blackish-brown and reddish-brown markings, underlying paler ones seeming to show up from beneath the dull, chalky surface; $2\cdot9 \times 1\cdot9$ inches (plate 123).

Nest.—None, the egg being placed in a crevice, or in a hollow of a ledge of a sea-cliff, or in a burrow in the turf-cap above the cliff.

Distribution.—Throughout the British Islands; found on the cliffs during the breeding season, on the open sea at other times.

The Razorbill breeds in colonies in the company of the Common Guillemot, depositing its one egg in a cranny or hollow on the cliff-face. Though generally less numerous than the Guillemots, the Razorbills

Plate 16.



RAZORBILL. COMMON GUILLEMOT.

Plate 17.



PUFFIN. LITTLE AUK.



have the same habit of lining the rocky ledges, their dark backs towards the rock and their white breasts towards the sea. They resemble the Guillemots in their rapid, headlong flight, in their habits of sitting in the water in flocks at the cliff-foot, and in diving and propelling themselves under water in chase of fish. They have also similarly unearthly cries—low, guttural sounds with something human in their quality. The large, razor-like bill, however, serves at once to distinguish the Razorbill from the Guillemot or any other cliff-breeder; and when the birds are floating on the water their sharply cocked tails serve as a further distinguishing mark.

COMMON GUILLEMOT—18 inches; long, pointed, black bill.

PUFFIN—13 inches; blue, yellow, and red bill; white face; bright-red legs and feet.

COMMON GUILLEMOT.—Plate 16. 18 inches. To any but a close observer the Common Guillemot will appear to be a black-and-white bird. In reality the head, neck, and upper parts are of a very dark brown, the under parts and a narrow bar across the wings being white. The legs and feet are of an olive colour, and the latter are webbed. *The bill is black, long, straight, and sharply pointed.* Resident.

Egg.—1, pear-shaped, extremely variable in colouring, the commonest, perhaps, being pale to bright green in the ground, blotched, scrolled, and spotted with black or dark reddish-brown; some are whitish in the ground-colour, with or without

the dark markings; others are plain green, and occasionally of a rich reddish-brown; 3.25×2.0 inches (plate 123).

Nest.—None, the egg being placed on open cliff-ledge or on the flat tops of rock-stacks.

Distribution.—Around the coasts of the British Isles wherever suitable cliffs or rock-stacks occur.

Common Guillemots breed in colonies on cliff-ledge or rock-stacks, the single egg being deposited on the bare rock. During the breeding season many birds, closely packed, line the ledges, their dusky backs turned landwards and their white breasts towards the sea. In this they resemble their associates the Puffins and Razorbills, also birds with dark upper plumage, and with the lower parts white. The long, sharp bill of the Guillemot, however, at once distinguishes it from both. In flight the Guillemot's short wings beat violently, and the bird shoots rapidly along, in form like a small torpedo, unable to indulge in any graces of flight beyond the long, gradual curve with which it sweeps in from the sea or hurries out to sea again. When it alights either on the rock or on the water, it plumps down abruptly. Large companies of Guillemots generally cover the water at the foot of the cliffs, drifting irregularly with the currents. The bird is an expert diver, using its wings as fins under water. The Guillemot's principal cries are an almost human moan and a barking sound as of a pup. This bird is more numerous than the Razorbill, with which it associates freely, generally sharing the same nesting-site, the Guillemots depositing their eggs on the more

open ledges, and the Razorbill in the securer crannies and hollows of the rocks. After the breeding season the birds take to the open sea, returning to the old breeding-site in the following spring.

RAZORBILL—17 inches; massive black bill like a razor-head, crossed by thin, white, curving line at the centre; white line from base of upper mandible to the eye.

PUFFIN—13 inches; massive tri-coloured bill; white face; bright-red legs.

BLACK GUILLEMOT—14 inches; entirely black save a solid white patch on the wing. Breeds on the cliffs of the west coast of Scotland and of the north and west coasts of Ireland. Much smaller than the Common Guillemot, but similar in its habits. Eggs, 2, bluish or greenish white, spotted with ash-gray and various shades of brown, and placed in crevices in cliffs or on the ground among boulders (plate 136).

PUFFIN.—Plate 17. 13 inches. Crown, upper parts, and throat-band black; white owlsh face; under parts also white; *massive, tri-coloured bill*, front half bright red, thin yellow stripe across the middle, and broad bluish band at base; legs and webbed feet bright red. Summer migrant.

Egg.—1, dull whitish, with a few indistinct pale-gray and pale-brown spots and blotches 'showing through' the surface; 2.25×1.6 inches (plate 123).

Nest.—None, the egg being placed in the fissure of a cliff, or down a burrow in the turf-cap above the cliff, the burrow being that of an expropriated rabbit or made by the bird itself.

Distribution.—General around the coasts of the British Isles where suitable sites occur, but sparsely from the Isle of Wight to Cornwall, and on the

east side of England restricted to the Flamborough cliffs and the Farne Islands.

If the squat, rotund form of the Puffin fail to enable the observer to identify it, a glance at its bill will suffice. The latter is a massive, gaudy structure, roughly triangular, continuing the outline of the head and chin in a manner suggestive of a Parrot. A round-eyed, apparently spectacled creature, it stands upright, and watches the observer with a ludicrous air of mild surprise. Puffins breed in colonies, occupying burrows, generally excavated by themselves in the turfy cap of some rocky headland or island. Like the Guillemots and Razorbills, they have the habit of lining the cliff-ledges, their dark backs turned landwards and their white breasts towards the sea. But in any Puffin colony there is a constant movement throughout the day of birds coming up from the sea on short, violently beating wings, their bright-red legs tucked up against their white stomachs, and in their bills three or four small shining fish held crosswise. As they go they emit a low, guttural sound, which may be imitated by laughing low in the throat with the lips closed. If disturbed in their burrows they give vent to a low growl. Like Guillemots and Razorbills, Puffins have the habit of sitting in the water in large companies at the foot of a cliff, and diving for fish, which they pursue under water with a fin-like action of their wings. After the breeding season they take to the open sea.

RAZORBILL—17 inches; massive black bill like razor-head, crossed by thin white line in centre; legs and feet blackish-brown.

Plate 18.



MANX SHEARWATER.





STORM-PETREL.



COMMON GUILLEMOT—18 inches; bill black, long, straight, and sharply pointed; legs and feet dull olive.

BLACK GUILLEMOT—14 inches; legs deep red like Puffin, but bill dark, longer, and pointed; plumage wholly black save a white wing-patch and white, though black-edged, underwings.

LITTLE AUK— $8\frac{1}{2}$ inches; similarly black above and white below; visits our seas, principally in the north, in flocks in winter.

LITTLE AUK.—Plate 17. $8\frac{1}{2}$ inches. Head, neck, and upper parts black; a white spot over the eye; wings black, with a white cross-bar and some of the flight-feathers tipped with white; under parts white; bill and legs grayish-black. In winter the chin and throat become white, and the white of the throat extends round the neck as a partial collar. Winter migrant.

The Little Auk is a cliff-breeder in the far north, visiting the more northerly coasts of the British Islands, and the Welsh and Irish coasts, in winter; at times it goes as far south as the English Channel, and storm-blown birds are occasionally found at a considerable distance inland. In appearance the Little Auk resembles the Puffin more than any other of the Auks, especially when the Puffin has shed the gaudy sheath which in summer covers the dark, true bill inside. Like the Puffin, the Little Auk takes to the open sea as soon as the breeding season is over, passing its whole time there, and even sleeping upon the water. The short, quick-beating wings and rapid, straight flight recall the Puffin; also the bird's habit, when disturbed, of splashing along the surface of the

sea as if unable to fly. Like the Puffin, this bird is an expert diver for fish and crustaceans. It also attends fishing-boats for the sake of the offal thrown overboard. The Puffin is the only sea-bird with which the Little Auk might be confounded, but attention to the great difference in size will obviate confusion.

MANX SHEARWATER.—Plate 18. Length, 15 inches. Upper parts all black, under parts white; the line of division, when the bird is seen in profile, running centrally from the base of the bill to the tail. There are a few inconspicuous grayish mottlings on the white at the sides of the neck. In its general markings the Manx Shearwater therefore resembles the group of cliff-breeders including the Common Guillemot, the Razorbill, and the Puffin. But the very long, sharply pointed wings, and the bill, legs, and feet, of the Manx Shearwater serve as distinguishing marks. *The bill is blackish, long, slender, the upper mandible curving sharply downwards at the tip.* The legs and feet are flesh-colour. Summer migrant.

Egg.—1, white and smooth; 2.4×1.65 inches (plate 123).

Nest.—A slight bedding of dry grass at the end of a burrow.

Distribution.—General in British waters, but breeding principally on islands lying off the west coast of Great Britain, and on islands off the Irish coast.

Unlike the shorter-winged Guillemot, Razorbill,

and Puffin, the Manx Shearwater is not bound to a laborious, dead-ahead flight, but scours the waves with the splendid freedom of all the Petrels. The 'shearing' consists of an alternate rising and falling as the bird flies, never far above the surface of the water. Scouring the waves, to the shifting contour of which it adapts its flight, it rises, and, canting, cuts down sideways on outspread wings; then, after skimming the waves again, it rises once more, and in a similar manner cuts down to the surface in the opposite direction. The dark upper and the white under parts thus come into view with some regularity of alternation. The bird is oceanic in its habits, and may be met many miles from land. As a breeder it resembles the Puffin, making a deep burrow in the soft earth at the cliff-head in which to deposit its one egg. During the breeding season it flies by night, its plaintive '*Kookoo-kooroo!*' sounding now here, now there, as the bird wanders over the dark waters.

COMMON GUILLEMOT—18 inches; upper parts dark brown; wing-bar and under parts white; bill with plain, undeflected point; legs and feet olive.

RAZORBILL—17 inches; black above; wing-bar and under parts white; massive bill, shaped like a razor-head.

PUFFIN—13 inches; thick-set; white owlsh face; massive tri-coloured bill; legs and feet bright red.

STORM-PETREL.—Plate 19. $6\frac{1}{2}$ inches. Black throughout, except a patch of solid white on the upper surface from the rump inclusive to the root of the tail; bill, legs, and feet also black, the bill

hooked, the feet webbed. The Storm-Petrel is the smallest bird having webbed feet. Summer migrant.

Egg.—1, white, sometimes with faint reddish-brown spots; $1.15 \times .85$ inch (plate 123).

Nest.—A scanty grass bedding at the end of a burrow, but sometimes the egg is placed on the ground under shelter of stones or in openings in the rocks.

Distribution.—On all British waters, but breeding principally on low islands off the Scotch and Irish coasts, and at some points on the Welsh coast, on an islet near Lundy, and in the Scilly group.

From its winter wandering over the surface of the open seas, the Storm-Petrel comes in about May to its breeding-haunts in the rocky islands lying off the Scotch and Irish coasts, also to some points on the west coast of England, but not the east. It places its one white egg in holes among the rocks or in a burrow in the turf, going out only at night-time to procure the oily substance with which it feeds its young one. After the breeding season the birds take to the open waters again, and may then be found on all our seas. Usually Storm-Petrels go singly, skimming the waves in ceaseless wandering, at times paddling along the surface with their hanging, webbed feet. A better view is obtained, however, when a small party forms in the wake of a steamer, following for miles close astern and low down to the water, for the sake of the matter—as one must suppose—churned up by the screw. At such times, with the solid white patch on the rump showing clearly, they resemble House-Martins in their general appearance. What they find or how they take it I am at a loss to say; for I



Plate 20.



BULLFINCH.

Plate 21.



BLACKCAP.



have watched them, and other Petrels, for what in the aggregate must be weeks, but never saw one arrest its flight and set to work upon any food. What they take I can only imagine them to get from the surface of the water in the course of their ceaseless, and what looks like fruitless, wandering. In this wave-skimming they never rise from the surface, and the only alternative to their eternal scouring of the waters seems to be to sit rocking upon them like so many tiny ducks. The bird is about the size of a Sparrow. *No other bird similarly small will be found in our seas unless it be a Petrel or a migrating land-bird.* The latter, however, will keep up well from the water.

FORK-TAILED PETREL—7½ inches; slaty-black above, darker below; white patch on upper surface next to tail; tail long, deeply forked. In the British Islands it breeds only in St Kilda and the Outer Hebrides, but frequents the waters around all the coasts of Great Britain in winter.

NOTES TO 'BLACK-AND-WHITE BIRDS.'

SWALLOW AND HOUSE-MARTIN.—Both strongly marked black-and-white birds; but, the form of the Swallow being so well known, it has been used as the type for the group, 'SWALLOW AND SWALLOW-LIKE BIRDS.'

COOT.—If sought here because of generally dusky plumage and white patch on forehead, *vide* 'BLACK BIRDS.' An inland fresh-water swimming and diving bird.

MOORHEN.—13 inches. If sought here because of generally blackish plumage, white side-feathers, and white patch beneath the tail, refer to 'BLACK BIRDS.' An inland fresh-water swimming and diving bird.

BLACK GUILLEMOT.—14 inches. A cliff-breeder, swimmer and diver, entirely black, except solid white patch on wing: see footnote to Common Guillemot under 'BLACK-AND-WHITE BIRDS.'

TERNs.—White sea-birds with black caps, gray backs, and deeply forked tails; but because white in all other parts described under 'WHITE SEA-BIRDS.'

BLACK-HEADED GULL.—16 inches. A gull with head entirely black in summer; but because white in all other parts except the gray wings, described under 'WHITE SEA-BIRDS.'

LESSER BLACK-BACKED GULL.—22 inches. A sea-gull, black on back and wings; but because white in all other parts, described under 'WHITE SEA-BIRDS.'

GREAT BLACK-BACKED GULL.—30 inches. As the preceding bird.

BLACK GROUSE.—15-22 inches. The male is black, with large divided tail and red wattle, but white beneath the wings and the root of the tail; it has also a white wing-bar. A percher in woods in Scotland and north of England, but feeding on moors and in stubbles. See under 'GROUSE.'

TUFTED DUCK.—A black diving duck with a white patch on the wing, and the sides and under parts of the body white: *vide* 'DIVING DUCKS.'

GREAT NORTHERN DIVER.—A 33-inch marine diver, with head and long neck black, the latter with two white-streaked collars, the upper parts variegated with black and white, and the under parts white. Being duck-like in form, it has been described under 'DUCK-LIKE DIVING BIRDS.'

SMEW.—A 17-inch marine diver, mostly white, but with face, hind-head, and back black, and wings mixed black and white. Being duck-like in form, it has been described under 'DUCK-LIKE DIVING BIRDS.'

BLACK-HEADED BIRDS.

BULLFINCH.—Plate 20. Length, 6 inches. Upper parts smoky-gray; under parts red; black hood covering forehead, crown, and chin; wings and tail black, the former with a bold whitish cross-bar; parts about base of tail white; bill and legs black, the former short and like a Parrot's. *Female*: capped like the male, but upper parts brown, hind-neck gray, and breast pale brown. Resident.

Eggs.—4–5, pale blue, speckled and streaked with purplish-gray and dark brownish-purple; $\cdot 73 \times \cdot 55$ inch (plate 123).

Nest.—Of fine root-fibres, lined with hair, placed upon a platform of interwoven twigs, itself secured in a well-grown whitethorn hedge, or placed well out on a low branch of a yew-tree or other tree of full leafage affording close cover.

Distribution.—Very general in wooded districts throughout the British Isles, but nowhere numerous.

The Bullfinch is the only ruddy-breasted bird with a black cap; and even when, as in the female, the ruddy breast gives place to pale brown, the conspicuous cap, sharply defined in a line passing round the crown and below the eye and chin, is distinctive. Only the Stonechat combines a ruddy breast with a black head, but in that case the whole head, throat,

nape, and back are black. The Bullfinch is very generally diffused, and nests in low trees, dense bushes, or hedgerows. It pairs for life, and is generally to be met feeding in pairs, its food consisting of fruit, seeds, insects, and young buds, in collecting which it frequents garden, copse, and hedgerow—rarely, if ever, going to the ground. Its song is trivial, and consists of only a few low notes; on the other hand, its call-note is a musical, piping, single note, distinct and distinctive.

STONECHAT—5 $\frac{1}{4}$ inches; head, neck, and throat black; sides of neck white; bill longer, slender, straight, and pointed. A bird of open gorse-lands. Call-note, 'U-tack!'

BLACKCAP—5 $\frac{1}{2}$ inches; a brilliant songster; brown above; gray-breasted; white below; pointed bill. The rim of the cap does not descend below the eye nor include the chin as in the Bullfinch.

BLACKCAP.—Plate 21. Length, 5 $\frac{1}{2}$ inches. General colour of upper parts, wings, and tail ashy-brown; neck and under parts ashy-gray, the latter becoming white on the belly; head capped with glossy black. Summer migrant.

Eggs.—4–5, whitish, mottled with ash and light brown, and having a few isolated spots and streaks of dark brown; .73 × .58 inch. There is a variety tinged with red (plate 123).

Nest.—Of dry grass, lined with root-fibres and hair, and placed a few feet from the ground in the fork of a branch of a bush.

Distribution.—Local throughout England and



COAL-TITMOUSE.





REED-BUNTING.

G *

Wales; south of Scotland, rarer; south-east Ireland, rarer still.

The Blackcap is a woodland songster of the very first rank. Like others of the great singers, he is, roughly stated, brown above and white below, the inconspicuous garb of so many of those whose distinction lies in their song rather than in their plumage. Yet, for some merit best known to herself, Nature has conferred upon the Blackcap the outward distinction of a jet-black cap, and as the possessor of this he is unique among the truly great British songsters. This bird nests in the undergrowth in wooded spots, but as a rule perches higher to sing. At such times, addressing himself now to the right, now to the left, of some imaginary auditory, he repeats, with puffed throat, a pure warbling strain, soft at first, but gathering force and brilliancy in its development, from time to time introducing little intermezzos of subdued soliloquy, aptly designated by White of Selborne 'inward melody.' Not at all times, however, is he thus earnestly set to deliver himself, for often, singing as he canvasses the twig-ends for his insect-food, he emits a rambling, half-hearted song which does him little credit as a serious artist. The song is between those of the Willow-Warbler and the Chaffinch, which in a general way it resembles; but it lacks the rather feminine refinement of the former, and falls short of the 'smashing' brilliancy of the latter. This bird is stated sometimes to remain in England during the winter.

GARDEN-WARBLER—5½ inches; in its general appearance, habits, and song closely resembling the Blackcap, but lacking the distinctive black cap.

COAL-TIT. — Plate 22. Length, $4\frac{1}{4}$ inches. Head, throat, and front of neck black; cheeks, sides of neck, and patch on the nape white; back smoky-gray; wing and tail feathers dusky, the former with two thin, white cross-bars; under parts grayish-white; sides of body brownish. Resident.

Eggs.—6–8, or more, white, with light-red spots; $\cdot 7 \times \cdot 55$ inch (plate 123).

Nest.—Of moss and wool, lined with hair, and placed in a hole, not high, in a tree, wall, or decaying stump.

Distribution.—General throughout the British Isles; common in the north of Scotland.

Coal-Tits, though widely distributed, are not numerous. In most parts of the country scores of Great or Blue Tits may be seen for one of either the Coal-Tit or Marsh-Tit. The Coal-Tit nests near the ground in holes in trees or walls, and is to be looked for in wooded districts, principally pine, birch, and fir plantations. In autumn the birds band together or with other Tits, exhibiting while searching the trees for the minute life upon which they principally subsist all the restless activity and eccentric posturing tricks which characterise the Tit tribe generally. The Coal-Tit has, with the Marsh-Tit, whose soberer colours it shares, its points of difference from the more vividly coloured Great and Blue Tits. It is less vehement in disposition; it goes oftener to the ground, and will remain there for some little time feeding quietly; its note is thinner and more acute than those of its sturdier kinsmen. Winter brings the Coal-Tit into closer contact with man, and it is at that time to be seen

among the heterogeneous bands of Tits, Golderests, and Tree-Creepers which pass through our gardens. The *large* white nape-patch on the otherwise black hind-neck is the distinguishing mark of a Coal-Tit.

GREAT TIT—6 inches; white nape-patch small; upper parts green and blue; under parts bright yellow, with heavy black central breast-band.

MARSH-TIT—4½ inches; shares the soberer colours of the Coal-Tit, but the nape is entirely black.

BLUE TIT—4½ inches; green and blue above; sides of face white, divided by a dark stripe through the eye; under parts bright yellow.

MARSH-TIT.—Form, like the Coal-Tit (plate 22). Length, 4½ inches. Head, nape, and chin black; cheeks, sides of neck, and under parts dull-whitish; back grayish-brown; wings and tail duskier. Resident.

Eggs.—5-8, or more, white, spotted with reddish-brown, more thickly at the larger end; .61 × .47 inch (plate 123).

Nest.—Of moss, wool, hair, and willow-down, placed in a hole in a tree, chiefly the willow and the alder, or in a decaying stump.

Distribution.—General in England and Wales; local in Scotland, chiefly in the south; in Ireland, from east to north-east, rare.

The Coal-Tit has a large white nape-patch, the Great and Blue Tits less conspicuous ones; the Marsh-Tit's distinction is that, its black cap extending completely down the nape, it has *no white nape-patch* at all. Lacking the bright colours of the Great and

Blue Tit, it shares the soberer garb of the Coal-Tit; but, while the prevailing tone in the colour of the back of the Coal-Tit is gray, in the Marsh-Tit it is brown. Like the Coal-Tit, the Marsh-Tit is much less numerous than either the Great or Blue Tit. It is, however, in no particular sense a denizen of marshes, but frequents gardens, hedgerows, and woods, and nests in cavities in tree-stumps and similar situations. Its shrill, metallic note, eccentric posturings on the branches, and its habit of roving in parties comprising members of the Tit tribe, and of other clambering species, such as Golderests, Redpolls, Tree-Creepers, and Nuthatches, as well as its omnivorous character, are traits common to all the Tits. It is a regular visitant to our gardens in winter, but rarer than the other Tits.

COAL-TIT—4 $\frac{1}{4}$ inches; smoke-gray on the back; large white nape-patch.

BLUE TIT—4 $\frac{1}{2}$ inches; blue and green above; yellow below; dark line through the eye, dividing the face.

GREAT TIT—6 inches; green and blue above; yellow below; bold black band down centre of breast.

REED-BUNTING.—Plate 23. Length, 6 inches. Head and throat black, bounded by a white collar; a moustachial streak, also white, from the base of the bill to the collar; upper parts ruddy-brown, mottled with heavy black streaks along the feathers; wings and tail dark, outer tail-feathers edged with white; under parts white, with blackish streaks. *Female*: of a generally browner colour, and lacking the black head and the white collar and throat-bands of the male. Resident.





COMMON WHITETHROAT.



Eggs.—4-6, purple-gray or pinkish-brown, boldly spotted and streaked with dark purplish-brown; $\cdot77 \times \cdot59$ inch (plate 123).

Nest.—Of dead grass and the leaves and stems of aquatic plants, lined with root-fibres, hair, and reed-tops, and placed in a tuft of rushes or in rank herbage near to water.

Distribution.—General.

The name of the Reed-Bunting sufficiently well indicates his haunts. He is a reed-bird, and as such is to be sought in reed-grown ponds, by the river-side, or on the marsh. The nest is placed a little above the surface of the water or of the ground among reeds or coarser weed growth, and here, clasping a stem, the male is oftenest to be seen, uttering laboriously a simple note—‘*Trit-trit-trit-tritrit!*’ When disturbed the bird flies from one low perch to another, with a low flitting performed with spasmodic vibrations of the wings. No other British bird of similar size has markings resembling the black head and white collar of the Reed-Bunting, and birds sharing its habit of nesting in and perching on reeds, such as the Sedge-Warbler and Reed-Warbler, are quite different from it in form, markings, and note. Although the Reed-Bunting perches also on bushes and hedge-tops, it rarely ascends trees. When on the ground it hops.

SEDGE-WARBLER—5 inches; a small, flat-browed bird, nesting in reeds and low bushes by the water-side; brown above, darkly streaked; buffy-white below; heavy white eyebrow; bill narrower and longer than in the Reed-Bunting. The song is a long-sustained, excited, chattering medley of song-notes and other harsher tones, uttered from the bird’s hiding-place in the reeds.

REED-WARBLER.—5 inches; in form, general colour, habits, and note similar to the Sedge-Warbler, but lacks the heavy white eyebrow, and its song is more even and subdued.

NOTES TO 'BLACK-HEADED BIRDS.'

BLACK-HEADED GULL.—This bird, being entirely white except the gray upper parts and, in summer, the black head, has been described under 'WHITE SEA-BIRDS.'

TERNs.—White sea-birds with long, slender wings and tail, the latter deeply forked, and with gray upper parts and black caps; but because in other respects white, described under 'WHITE SEA-BIRDS.'

STONECHAT.—A 5½-inch perching bird of the gorse common, with head and throat entirely black and separated from the largely black upper parts and wings by a white patch on the sides of the neck; but because of the bright-chestnut breast, described under 'RUDDY-BREASTED BIRDS.'

BIRDS BROWN ABOVE AND WHITE BELOW.

NIGHTINGALE.—Plate 24. Length, $6\frac{1}{2}$ inches. Upper parts plain ruddy-brown, ruddier on the tail and dusker on the larger wing-feathers; under parts grayish-white, suffused with brown on the breast and sides. Summer migrant.

Eggs.—4–6, plain olive-brown, but, exceptionally, blue-green, mottled with reddish-brown; $\cdot 8 \times \cdot 6$ inch (plate 124).

Nest.—Of dead leaves, lined with fine grass, and placed on the ground among undergrowth or in hedge-packing.

Distribution.—In England not passing west of Devonshire, and rarely straggling as far north as Cheshire and Yorkshire; in Wales limited to Brecon and Glamorganshire; unknown in Scotland or Ireland.

The Nightingale appears at the woodside, in tangled hedgerows or thickets, about the third week in April, when its song, especially in the quiet hours after sundown, takes the ear by its exquisitely finished melody. Those who would know the Nightingale in summer should attend to the Redbreast in winter. Although duller in his olive back, brighter in his scarlet stomacher, and more rotund in person, the Redbreast by his gestures declares his close kinship with the Nightingale. The sudden hops and pauses

while feeding on the ground, the habit of drawing themselves up with closely dressed plumage, the frequent bobbings of head and flirtings of tail, are characteristic of Redbreast and Nightingale alike. The song of the Nightingale, too, is of the same quality as the purer notes of the Redbreast, but is given roundly and without hesitancy. Often it ends with a clicking note, and another distinctive note is one that is held on without modulation, but is delivered *crescendo*. The song ceases after the young are hatched in June. The nest is placed on the ground, frequently among the tangled growth and litter of old leaves at the bottom of a woodside hedge. When disturbed in their nesting quarters, the old birds flit from bough to bough about the intruder, uttering at one time a low, churring, objurgatory note; at another a note of a peculiarly 'yearning' quality.

COMMON WHITETHROAT— $5\frac{1}{2}$ inches; head ash-gray; throat white, notably pure. Although this bird also uses a low, churring note, it may be distinguished by its rambling, jerky, jabbering song.

WOOD-WREN— $5\frac{1}{4}$ inches; upper parts yellowish-green; under parts white, yellow on throat; yellow eyebrow. Call, 'Tui!' complaining note, 'Dór!' Song ends with close, shivering trill.

WILLOW-WREN—5 inches; upper parts olive-green; under parts white, with yellow tinge. Call, 'Tui!' Song of about fourteen equally spaced notes, gradually diminishing in pitch and volume.

COMMON WHITETHROAT.—Plate 25. Length, $5\frac{1}{2}$ inches. Head ashy-gray: upper parts ruddy-brown; wings darker, with chestnut edges in some of



GARDEN-WARBLE.



the feathers; tail-feathers dark brown, with white in the outer ones; under parts white, flushed with pink on the breast; throat pure white; bill brown; legs and feet pale brown. Summer migrant.

Eggs.—4-6, greenish-white, spotted with gray and brown; $\cdot 7 \times \cdot 55$ inch (plate 124).

Nest.—Deep, and loosely woven, slung low among nettles or other weeds, occasionally in brambles.

Distribution.—General.

This bird, after returning to our country about the middle of April, slings its nest in nettle-beds, coarse weeds, or brambles, a little above the ground, and generally in the shelter of a hedgerow. There might be some chance of overlooking it were it not so determined to have its say to every one approaching its retreat. Usually it opens with a scolding '*Gr-r-r!*' delivered from inside the hedge, and as one continues to approach, the bird dashes over from the back and takes its stand on the hedge-top a short distance ahead. There, with excited gestures and swaying its body from side to side, it jerks out a medley of ill-assorted notes more like heated speech than song, its head-feathers erected and its pure-white throat puffed out like a double chin as it does so. Repeating these actions as it precedes the observer, it doubles back at last behind the hedge to the spot whence it set out. This same medley of excited sounds is, indeed, its song, whilst uttering which it throws itself at times into the air, and, still vociferating, makes a short upward excursion, from which it breaks back and drops, with wings laid back, to the spot whence it rose. When feeding, the Whitethroat searches the

ends of the twigs for small life, and may also be seen threading the thickets and hedge-bottoms with the creeping motions of a Wren.

SEDGE-WARBLER—5 inches; flat-browed; upper parts brown, heavily streaked with dark brown; conspicuous white eyebrow. Although this bird also has a sustained, gabbling song, it is generally heard beside water.

REED-WARBLER—5 inches; upper parts plain ruddy-brown, therefore no ashy head; under parts white, but buffish. Although this bird uses a continuous prattling song somewhat similar to that of the White-throat, the bird itself is a denizen of reed and osier beds.

LESSER WHITETHROAT—5½ inches; upper parts gray; bill blackish; legs slate. Song, opening with a few subdued notes, bursts out in a high-pitched note, exactly repeated several times. This song is generally delivered from high trees.

LESSER WHITETHROAT.—Form, like Common Whitethroat (plate 25). Length, 5½ inches. Upper parts brownish-gray; wing and tail feathers brown with lighter margins, the outer feathers of the tail partly white; under parts white; bill blackish; legs slate; iris white. Summer migrant.

Eggs.—5-6, creamy-white, blotched and spotted with gray and yellowish-brown, and with some smaller markings of a darker brown; .65 × .5 inch (plate 124).

Nest.—Shallow, made of dry grass, lined with hair, and placed in hedges and in low bushes and brambles.

Distribution.—Principally in the southern counties of England, but not in Cornwall; rarer from the Midlands to south Scotland; Brecon; not in Ireland.

This bird is not so much the Lesser as the rarer Whitethroat, the difference between it and the Common Whitethroat in point of size being inappreciable, but in range and numbers great. Arriving during April, it nests in brambles, or sometimes in the higher hedgerows. The nesting-site is always within easy distance of trees, for the Lesser Whitethroat is as a rule a higher percher than the common species. In form the two species are practically indistinguishable. They differ, however, in colour, song, and habits. The Lesser Whitethroat is of a gray tone in the upper parts, differing therein notably from the duller ash-gray head, ruddy-brown back, and warm chestnut in the wings of the Common Whitethroat. The song of the latter is a hurried gabbling of many notes; that of the Lesser Whitethroat opens with a few subdued undertones, then bursts out in a high-pitched note, repeated several times without variation. This song is generally given from a tree. Both birds have pure-white throats, and a similar habit of puffing them out very fully when singing.

WOOD-WREN— $5\frac{1}{4}$ inches; yellowish-green above; prominent yellow eyebrow; yellowish-white below. Also a singer in the high trees, but the song opens with a few clearly warbled notes, and runs up into a close, shivering trill. It has also a detached note, '*Ting! ting! ting!*' repeated several times in succession in a measured manner.

GARDEN-WARBLED.—Plate 26. Length, $5\frac{1}{2}$ inches. Upper parts olive-brown, with pale streak over eye; wings and tail darker; under parts grayish-

white, with a ruddy cast on breast and flanks; bill brown; legs lead-colour. Summer migrant.

Eggs.—4–5, white, marbled with ash and warm brown, having also a few dark-brown spots and streaks; $\cdot 75 \times \cdot 6$ inch (plate 124).

Nest.—Of dry grass, moss, and wool, lined with fine root-fibres and hair, and placed in low bushes or thick herbage.

Distribution.—Distributed locally and sparsely throughout England; increasingly rare and local in Wales, Scotland, and Ireland, in the order named.

The Garden-Warbler is a very near relative of the Blackcap, which it closely resembles in all particulars except the distinctive black cap. Its sober colouring and lack of any bold feature make it harder to identify. It builds its nest in low bush growth, and frequents wooded districts and orchards, where it seeks its insect-food in summer by canvassing the ends of the twigs, or by darting out to take a fly on the wing in the manner of a Flycatcher. Later it feeds on elder-berries and other berries and fruits. Its song is its surest distinguishing mark. It is a beautiful warbling, lacking the dash and brilliancy of the Blackcap's song, which in other ways it closely resembles; but it is peculiar in this, that it is often more sustained than the song of any warbling songster, as if the singer, instead of flinging out a finished strain for the delectation of others, were warbling to itself a long desultory song, lasting for minutes—sometimes several minutes—at a time. There is no other warbling songster with so sus-

tained a song, and it is at times delivered in the twilight, like that of the Nightingale.

WOOD-WREN—5 $\frac{1}{4}$ inches; yellowish-green above; pure white below, but throat clear yellow; prominent yellow eyebrow. Song, few warbled notes, followed by the closely crowded notes of a shivering trill.

WILLOW-WREN—5 inches; olive above; yellowish-white below. Song, about fourteen warbled notes of equal duration, successively lower in pitch and of diminished force, forming a cadence repeated without variation.

NIGHTINGALE—6 $\frac{1}{2}$ inches; plain ruddy-brown above; grayish-white below. Song more varied and stronger.

CHIFF-CHAFF.—Form, resembling Willow-Wren (plate 27). Length, 4 $\frac{3}{4}$ inches. Dull olive-green above; wing and tail feathers dusky, edged with olive; inconspicuous yellowish-white eyebrow; under parts dull yellowish-white; legs and feet blackish. Summer migrant.

Eggs.—Usually 6, white, spotted with purplish-brown, chiefly at the larger end, and occasionally with a few gray blotches; $\cdot 6 \times \cdot 45$ inch (plate 124).

Nest.—Domed, with entrance at the side, made of dry grass, moss, and leaves, plentifully lined with feathers, and placed on or near the ground in a hedge-bank or low bush.

Distribution.—General throughout England, but local in Norfolk, Lancashire, and Yorkshire; rarer in Scotland; common in Ireland.

The Chiff-Chaff is smaller and duller in colour than either of its very similar relatives, the Wood-Wren and Willow-Wren, but there is no striking feature in its

appearance by which it may be distinguished by one unacquainted with the three birds. Observation must therefore be directed to its note—the only song it has—a speech-like ‘*Chiff-chaff!*’ uttered from the time it arrives late in March until May, and again from September until it departs in October, though some of the birds are well known to linger on in a mild winter, especially in Devonshire and Cornwall. Upon its arrival it frequents woods for shelter, but soon builds its domed nest, often among the tangled growth on a hedge-bank. It is seldom seen on the ground, when feeding searching the ends of the twigs in the manner of the Wood-Wren and Willow-Wren. It is a restless, steadily working little bird, and when not lost in the higher trees, which it affects more than the Willow-Wren, it will afford occasional views of its blackish legs and feet, thereby furnishing the readiest means of distinguishing it from the Wood-Wren and Willow-Wren, whose legs and feet are brown.

WOOD-WREN—5½ inches; upper parts greenish-yellow; under parts white, except throat and sides of neck, which are bright yellow; conspicuous yellow eye-streak. Song, a few clearly warbled notes, followed by a rapid, prolonged trill.

WILLOW-WREN—5 inches; brighter both in the olive-green upper and in the yellowish-white under parts; has clearer eye-streak. Call-note, ‘*Tui!*’ Song of about fourteen notes equally spaced, descending, *diminuendo*.

WILLOW-WREN.—Plate 27. 5 inches. Upper parts olive-green; wing and tail feathers dusky, edged with olive-green; yellow eyebrow; sides of face and

of neck dull white; rest of under parts yellowish-white; legs and feet brown. Summer migrant.

Eggs.—6—8, white, speckled with light red; $\cdot 62 \times \cdot 46$ inch (plate 124).

Nest.—Half-domed, made of dry grass, lined with feathers and hair, and placed on or near the ground among grass or ferns, at the foot of a furze-bush, or in a low bush.

Distribution.—General.

The name Willow-Wren is not apt, the bird being in no special way connected with the willow. Arriving early in April, it betakes itself for shelter to woods and copses, and there the beautifully cadenced song opens at once, bird answering bird with untiring emulation. It forms a half-domed nest among grass or ground-growth in hedge-banks, open spaces in woods, or beneath a furze or other bush, and may be looked for in gardens and orchards, by the woodside or on commons, being very generally distributed. Plain greenish-brown above and yellowish-white below, the Willow-Wren in its appearance is of exquisite simplicity and delicacy. Although called 'Wren,' it is a bird of smoother curves and more elegant figure than the rotund, bustling, cock-tailed little personage known as the Common Wren. Its movements are restless, but with grace, and by constantly bending over on the branches to seek its insect-food on the under sides of the leaves, it has acquired a forward stoop when perching, not out of keeping with the fragile form and gentle character of the bird. At times it darts out to capture an insect on the wing in the manner of a Fly-

catcher. Whilst feeding it continues to utter its cheerful call-note, '*Tui!*' Its song distinguishes the Willow-Wren unmistakably from its very similar relatives, the Wood-Wren and the Chiff-Chaff. This song consists of about fourteen notes equally spaced, gradually descending in pitch and diminishing in volume, so as to form a true and exquisitely warbled cadence.

WOOD-WREN—5¼ inches; upper parts greenish-yellow; under parts pure white, except the throat, which is bright yellow; sides of neck bright yellow instead of dull white as in the Willow-Wren. Sings in high trees a song opening with a few clearly warbled notes, followed by a rapid, shivering trill.

CHIFF-CHAFF—4¾ inches; dull olive above; dull yellowish-white below; legs and feet blackish. Note, '*Chiff-chaff!*' No proper song.

WOOD-WREN.—Form, resembling Willow-Wren (plate 27). Length, 5¼ inches. Upper parts yellowish-green; wing and tail feathers dusky, edged in part with yellowish-green; bold yellow eye-streak; under parts white, but clear yellow on the throat; legs and feet light brown. Summer migrant.

Eggs.—5-7, white, thickly spotted and zoned with reddish-brown and gray; .65 × .55 (plate 124).

Nest.—Domed, with the opening at the side, made of dry grass and lined with hair, being placed on the ground in beds of dead leaves, or among grass or weed cover.

Distribution.—General in wooded districts in England and Wales; rarer in Scotland; occasional in Ireland.



WILLOW-WREN.



This bird is rightly named, being exclusively a bird of the woods. Returning to England in the latter half of April, it nests on the ground, but usually ranges the higher branches of beech and oak to feed and sing. Like the Willow-Wren, it is a sweetly trustful bird, and a little patient watching in the nesting season is often rewarded by a view of the bird returning to its well-concealed, domed nest with food for its young. Unlike those of the Chiff-Chaff and Willow-Wren, the nest is not lined with feathers. The facts that the Wood-Wren is a little larger than the Willow-Wren and Chiff-Chaff, has a full yellow eyebrow, and is brighter in colour generally, are insufficient to enable any one unacquainted with these three birds to distinguish them. Their habits and songs, therefore, must be observed. The Wood-Wren is a bird of the high woods, where he wanders by short progresses from tree to tree beneath the sunlit leaves, a little 'passionate pilgrim' of song as ethereal as the shadow and shine in which he moves. Sometimes he sings as he flits through the green spaces; oftener, taking his stand on some high bough and gripping it with his little feet, he throws his head back, and, with swaying body and vibrating wings and tail, pours out his strenuous strain. The song opens with a few detached, clear, warbling notes, but becoming more rapid as it proceeds, ends with a long, shivering trill in which the constituent notes barely retain their individuality. If disturbed while nesting, the bird flits on the low boughs about the intruder, uttering a doleful '*Dôr!*' The call-note is '*Tui!*' Its commonest note is a metallic '*Ting!*' delivered in series of half-a-dozen evenly spaced notes. Being

largely an insect-eater, the Wood-Wren, when feeding, is generally to be seen examining the leaves at the ends of the branches.

WILLOW-WREN—5 inches; more slightly built; upper parts olive; under parts white, almost wholly of yellowish cast; eyebrow much fainter. Song, fourteen equally timed notes, diminishing gradually both in pitch and volume.

CHIFF-CHAFF—4 $\frac{3}{4}$ inches; dull olive above; dull yellowish-white below; legs and feet blackish. Note, '*Chiff-chaff!*'

REED-WARBLER.—Form, like the Sedge-Warbler (plate 28). Length, 5 inches. Head (flat-browed), nape, and back ruddy-brown, unstreaked; wing and tail feathers dark-brown, with lighter edgings; faint white eye-stripe; under parts buffish-white. Summer migrant.

Eggs.—4-5, greenish-white, mottled with olive-brown and ash-gray, and sparingly speckled with dark brown; $\cdot 72 \times \cdot 53$ inch (plate 124).

Nest.—Very deep, of dry grass and moss, lined with wool, hair, and feathers, and suspended between reeds or the slender branches of willows and alders at a height of a few feet or a few yards above the ground or water.

Distribution.—Southern and midland counties of England, rarer to the north and south-west; Wales; not Scotland or Ireland.

Unlike the Sedge-Warbler, which is generally distributed, the Reed-Warbler is a bird principally of the southern and midland counties of England, rarer

towards the north and south-west. It inhabits Wales also. The nest, always slung—not laid upon a support—is generally placed in reed-beds, but is sometimes hung on osier-wands. In form, markings, habits, and song the Reed-Warbler closely resembles the Sedge-Warbler, but it is more slenderly built, *and is plain* (not streaked) on the upper parts. It uses a similarly heterogeneous mixture of low, chiding, and higher musical notes, delivered with equal hurry, persistence, and volubility, but with less vehemence, the notes being rattled off as the bird flits about among the reeds, occasionally popping up to glance along their tops ere diving again into concealment. Besides the *absence of the streaked back*, the *faint eye-stripe* in the Reed-Warbler serves to distinguish it from the Sedge-Warbler, which possesses a heavy white eye-stripe.

COMMON WHITETHROAT— $5\frac{1}{2}$ inches. This bird, like the Sedge-Warbler, may be confounded with the Reed-Warbler on account of its sustained, hurried, prattling song. The Common Whitethroat, however, has an ash-gray head, pure-white throat, and does not affect the water-side.

REED-BUNTING—6 inches; also nests in reed-beds; but the male has glossy-black head and white collar, and both male and female when flying expose conspicuously white outer tail-feathers. Both upper and under parts are streaked. Note, '*Trit!*' monotonously repeated.

SEDGE-WARBLER.—Plate 28. Length, 5 inches. Upper parts ruddy-brown, darkly streaked on the crown, faintly mottled on the back, but clearer towards the tail; wing and tail feathers dark brown, with lighter edgings; bold yellowish-white eye-stripe;

under parts buffish-white; clear white on the throat. Summer migrant.

Eggs.—5 – 6, closely and softly mottled with yellowish-brown upon a paler ground, often with a few excessively fine hair-lines; $\cdot 68 \times \cdot 52$ inch (plate 124).

Nest.—Deep, of dry grass and moss, lined with hair and fine grass-heads, and placed in thick herbage beside streams and ditches, sometimes in a bush or hedge.

Distribution.—General.

The Sedge-Warbler is a bird of the water-side, building in the reeds and willow-beds, tangled bushes by the sides of brooks, or others less near, but generally within reach of water. Its song is a continuous, gabbling medley of notes musical and unmusical, delivered as the bird wanders about under cover of the reeds or bushes. A low, harsh '*Chur-r-r!*' frequently recurs, the intervals being filled by sudden bursts of more highly pitched sounds, generally mechanical in their quality, and resembling the call-notes of several other birds. No bird emits such an incessant babble of heterogeneous sounds. At times it may be seen for a moment at the top of a reed or bush, the peculiarly *flat brow and bold white eye-band* being readily visible. The heavy eye-stripe alone stamps the Sedge-Warbler in a bird of such habits and surroundings. After nesting is over, the Sedge-Warbler goes clambering and chattering among the standing wheat, clinging to the stems sideways, as is its way among the reeds. The flight is low and hurried, accompanied at times by a running gabble

Plate 28.



SEDGE-WARBLER.

Plate 29.



GRASSHOPPER-WARBLER.



of notes, continued as the bird dives suddenly into cover again.

REED-WARBLER—5 inches ; similar in form, colour, habits, and song, but with fainter eye-stripe and upper plumage *plain* brown, that is, not mottled.

COMMON WHITETHROAT—5½ inches ; head and neck ashy ; no eye-streak ; outer tail-feathers largely white. Uses harsh ‘*Chur-r-r!*’ and sustained prattling song, but does not so habitually frequent the water-side.

REED-BUNTING—6 inches ; also nests in reed-beds, but the male has glossy-black head and broad white collar ; outer tail-feathers conspicuously white ; feathers of upper parts reddish-brown, with dark centres. Note, ‘*Trit!*’ monotonously repeated.

GRASSHOPPER-WARBLER—5½ inches ; olive-brown above, faintly clouded with dark centres to feathers ; very faint whitish eye-stripe ; tail much rounded at end. Note, a sustained reeling.

GRASSHOPPER-WARBLER.—Plate 29. Length, 5½ inches. Upper parts olive-brown, the feathers softly clouded with dark central streaks ; faint whitish eye-stripe ; wings and tail dusky, the feathers margined with olive-brown ; under parts white with a brownish cast, deeper on neck and breast ; feathers of the tail graduated, becoming shorter from the central ones outward. Summer migrant.

Eggs.—5–7, pinkish-white, finely speckled all over with reddish-brown ; .7 × .54 inch (plate 124).

Nest.—Of dry grass and moss, lined with finer grass, and placed near the ground in thick bushes or hedge-bottoms, or in coarse herbage.

Distribution.—England and Wales, notably in Northumberland and Durham ; rarer in Scotland ; almost throughout Ireland.

Because of its mottled upper parts, the Grasshopper-Warbler might possibly be confounded with the Sedge-Warbler; but the mottling of the latter is more sharply defined, whilst that of the Grasshopper-Warbler is soft and cloudy. The Grasshopper-Warbler, however, is far less likely to be seen than heard, for although it is a habitual skulker, it gives a liberal measure of its strange song. It nests on the ground in grass or weeds, sometimes in a hedge-bottom, besides affecting reed-beds and low bush growth. Here it worms its way about more like some creeping thing than a bird; or, secreted in the tangle, it gives utterance to that remarkable song which finds its nearest parallel among bird-notes in the reel of the Nightjar. In form this song consists of a continuous series of uniform pulsations of sound like the clicking of fine cogs in winding a clock; but the sound itself is not purely mechanical, having in it that metallic ring to be heard in the notes of grasshoppers, locusts, or cicadas. Like the reel of the Nightjar, the finer reel of the Grasshopper-Warbler is often uttered in the twilight, or even in the dark, for an indefinite time; but the sound, because of its tenuity, is usually ascribed by those who hear it to some insect rather than to a bird. When the Grasshopper-Warbler flies, the *graduated, and consequently much rounded, tail is spread.*

SEDGE-WARBLER—5 inches; upper parts sharply mottled with light and dark brown; heavy yellowish-white eye-stripe; under parts buffish-white. Song long-sustained, but varied, not uniform as in the Grasshopper-Warbler.

REED-WARBLER—5 inches; upper plumage plain brown; wing and tail feathers dark brown, with light edgings; faint eye-streak; under parts buffish-white. Song long-sustained, but not uniform as in the Grasshopper-Warbler.

HEDGE-SPARROW.—Plate 30. $5\frac{1}{2}$ inches. Head, throat, and neck slate-gray, brownish on the crown and nape; back ruddy-brown, mottled with dark-brown streaks; wings and tail darker brown; under parts dull white; bill dark brown and sharply pointed; legs light brown. Resident.

Eggs.—4–6, uniform bright blue; $\cdot 78 \times \cdot 56$ inch (plate 124).

Nest.—Of dry grass, moss, and wool, lined with hair, and placed in hedges, close brambles, or in heaps of dead hedge and tree clippings.

Distribution.—General throughout British Isles.

Observers of birds, new to the pursuit, at times confound the Hedge-Sparrow with the Redbreast, and are puzzled at the absence of the red breast. Although called a Sparrow, this bird is in fact quite different from the true Sparrows, which it resembles only in its possession of a ruddy-brown back streaked with black. The bill, slender and sharply pointed, is like that of the Redbreast, and quite unlike the stout, conical bill of the Sparrows. Attention to the colour of the head and neck will determine the Hedge-Sparrow, the bird appearing as if it had been dipped to the shoulders in some smoky-gray solution. It is principally a bird of the hedgerow, in which, or in some low bushy tangle, it builds its nest; and it is frequently to be seen hopping quietly along at the foot of the hedge, seeking its food on the ground, with a recurring shiver of the wings, which has caused it also to be called ‘Shufflewing.’ It is a solitary, retiring bird, but being resident throughout the year, appears in our gardens during winter,

without, however, associating with other birds. It has two vocal utterances, generally emitted as the bird stands at the top of a hedge; one, a single, loud, plaintive note; the other, being its song, consists of two notes differing in pitch, and uttered hurriedly many times in unbroken succession so as to form a jerky trill. Mild weather provokes the Hedge-Sparrow to song at any time of the year; but the plaintive note is heard mostly in the still autumn air, and the song opens vigorously in February, being one of the first of spring songs.

REDBREAST—5 $\frac{3}{4}$ inches; although in general shape similar to the Hedge-Sparrow, the upper parts are olive-brown without dark streaks, the breast red, and the song a highly varied warble.

HOUSE-SPARROW—6 inches; crown, nape, and lower back ash-gray; throat black; sides of face and of neck and under parts ashy-white; bill short, conical. Note, shrill chirp.

TREE-SPARROW—5 $\frac{1}{2}$ inches; head plain chestnut-brown; throat black; sides of neck and under parts grayish-white; bill short, conical. Note, shrill chirp.

CRESTED TITMOUSE.—Plate 31. Length, 4 $\frac{1}{2}$ inches. Upper parts olive-brown; lower parts whitish, with a tinge of buff; sides of face and neck white; collar and separate patch behind the ear black; crest black, white-edged. Resident.

Eggs.—5–8, or more, white, spotted with reddish-brown, chiefly at the larger end; .62 × .48 inch (plate 124).

Nest.—Of dry grass, moss, wool, hair, and feathers, placed in a hole in a tree, a rotten stump, or gate-

Plate 30.



HEDGE-SPARROW.

Plate 31.



CRESTED TITMOUSE.

stump, sometimes in closed nests of other species, such as Wrens and Long-Tailed Tits.

A bird of the pine forests of north Scotland, closely resembling in its appearance and habits the more generally diffused Titmice of Great Britain (which see), but at once distinguishable from any of them by its high, pointed crest. The Blue Tit will at times raise his crest, but it is quite inconspicuous when compared with the pointed, elevated headgear of the Crested Titmouse.

SPOTTED FLYCATCHER.—Plate 32. Length, $5\frac{1}{2}$ inches. Upper parts hair-brown, streaked with darker brown on the head; wings and tail dark brown, with lighter edgings to the feathers; under parts white, spotted with brown on the throat and streaked on the flanks. Summer migrant.

Eggs.—4–6, bluish or greenish white, clouded, blotched and spotted with rusty-brown and violet-gray; $\cdot 75 \times \cdot 55$ inch (plate 124).

Nest.—Of dry grass, moss, lichens, and strips of bark, lined with wool, feathers, and hair, and placed in a fork of ivy growing against wall or tree, on a beam in an outhouse, or in recesses about trees, walls, and outhouses generally.

Distribution.—Throughout the British Isles.

The spotting on the throat of this bird is so inconspicuous that he will appear at a moderate distance to be a bird 'brown above and white below,' and is therefore included under this heading. Having

no song properly so called, and a rarely used call-note sounding like '*E-ggypt-ggypt!*' there is little by which to identify this plain bird of plain ways. He is, nevertheless, a flycatcher in a very special sense. Perching upon a railing or low, dead branch, generally beside some open way, he darts from time to time into the air, and capturing a fly on wing, sometimes with an audible snap of his bill, at once returns to his perch to wait almost motionless until another one appears, when this performance is again gone through. Sometimes he has to double and turn upon a more than usually active fly, or when flies are numerous on the ground he settles among them, and his twistings and turnings as he flutters a foot or two above the earth in pursuit of them exhibit the Flycatcher as something of a winged acrobat. He is, however, generally an inactive bird of narrow ways, with two or three perching-places where he waits for his insect-food to come to him, and having swooped at and captured it, returns to his perch to wait for more. The nest is often placed in a fork of ivy growing against wall or tree, and the bird is never far from it. Many birds will capture flies in a similar way, but it requires little observation of the Flycatcher to learn that he *seldom takes a fly in any other way.*

HOUSE-SPARROW.—Length, 6 inches. Crown, nape, and lower back ash-gray; upper parts brown streaked with black; tail and wings brown, latter with one white cross-bar; throat black; sides of

the face and of the neck and under parts ashy-white. Resident.

Eggs.—5-6, grayish-white, speckled and blotched all over with dark brown, ash-brown, and gray; $\cdot 9 \times \cdot 6$ inch (plate 124).

Nest.—Of straw, dry grass, and frequently scraps of rag, paper, string, &c., lined with feathers, and placed under the eaves of roofs, in gutters, among ivy or creepers on walls, or in a tree near a house, in which last case the nest is domed.

Distribution.—General.

Nesting in any convenient hole in house-roofs, and at times in trees near to houses, the House-Sparrow offers himself to our observation at every turn. He is a songless bird, but with his brisk '*Cheep! cheep!*' and '*Chow-chow!*' and frequent hedgerow scuffles involving some half-dozen frantically chirping birds, probably makes more noise than any other bird. During winter, spring, and summer he remains about human habitations; but as soon as the grain ripens the birds flock to the fields, where they may be seen in gatherings of hundreds clinging to the standing oats or wheat, or later searching the stubble. In the summer months the bird turns flycatcher for a time, occasionally perching on roof-ridges or gutters, whence he rises with heavy flutterings to capture some wandering insect, then returns to his perch to wait for another. He may readily be distinguished by his *ash-gray crown, nape, and lower back* from the similar but rarer bird, the Tree-Sparrow.

TREE-SPARROW— $5\frac{1}{2}$ inches; head plain chestnut-brown.

TREE-SPARROW.—Form, like the House-Sparrow. Length, $5\frac{1}{2}$ inches. Head chestnut; upper parts brown streaked with black; wings and tail brown, the former with white double wing-bar; throat black; sides of neck whitish, with detached triangular black patch; under parts grayish-white; bill conical. Resident.

Eggs.—4–6, grayish-white, but almost entirely hidden by fine mottling of various shades of brown; $\cdot 75 \times \cdot 54$ inch (plate 124).

Nest.—Of hay lined with feathers, and placed in holes in pollard-trees, in the outside of thatched roofs, in openings in tiles, and in holes in cliffs.

The Tree-Sparrow is far rarer than the House-Sparrow, occurring pretty generally in the eastern parts of England and Scotland, locally elsewhere in these countries, and rarely in Wales and Ireland. It is for the most part a bird of the open country, nesting in trees—often pollard ones—in some suitable cavity or on the branches, although it is sufficiently familiar at times to make use of barns and outhouses for nesting purposes. By its brisk chirpings, its quarrelsome character, its habit of catching flies on the wing in the summer months and banding together in autumn in the standing grain and stubble, it resembles the House-Sparrow. From the latter, however, it may at once be distinguished by the *chestnut colour of the head*, there being in the Tree-Sparrow no suggestion of the ashy crown and nape of the House-Sparrow.

Plate 32.



SPOTTED FLYCATCHER.

j



REDWING.

THRUSH.



TWITE.—Form, like the Linnet and Redpoll (plate 49). Length, 5 inches. Upper parts brown, with paler brown edgings to the feathers, and white edgings to some of the wing and tail feathers; throat buffy, with dark streaks; rest of under parts white; rump of the male rosy; bill short and yellow; legs blackish. Resident.

Eggs.—3–4, occasionally more, pale bluish-green, spotted and blotched with pale purply-brown and deep reddish-brown, and with sparse spottings of darker brown, the markings being chiefly at the larger end; $\cdot 7 \times \cdot 5$ inch (plate 124).

Nest.—Of dry grass, root-fibres, moss, or bits of heather, according to surroundings, lined with wool, feathers, and hair, and placed on or near the ground, frequently among heather or in a furze-bush.

Distribution.—On moor and moss from the Midlands of England to the north of Scotland; little known in south and east England, though appearing in large numbers on the coast of Lincolnshire in autumn; common in upland parts of Ireland.

The Twite is a northern bird, breeding from Scotland to the midland counties of England, and in Ireland. Although often called the Mountain-Linnet, it is a bird not only of the uplands, but also nests on lowland mosses and wherever the ground is sufficiently moor-like to afford it heather, ling, furze, or acceptable substitutes, in which to build its nest. After nesting it flocks in the open lands and stubble-fields, and appears as a winter visitant in the south of England. In its form, size, and colouring,

its high, erratic flight, its chirping call and twittering song, it closely resembles the Common Linnet; but it lacks the crimson cap and breast which adorn the Linnet in summer, and may at all times be distinguished from that bird by its *yellow bill and blackish feet*, the bill of the Common Linnet being leaden-hued, and its feet brown.

LESSER REDPOLL— $4\frac{3}{4}$ inches. A slighter bird, with crimson crown and black chin, and (in summer) rosy breast and rump. An eccentric clamberer when feeding in trees.

PIPITS— $5\frac{3}{4}$ to $6\frac{1}{4}$ inches. Although of a similarly streaked brown above and streaked white below, frequenting open situations, banding together and calling to one another on the wing, and using a similarly high, erratic flight, the Pipits may be distinguished by their longer, sharper bills, a central black spot on the chest, their call-note, '*Wheet! wheet! wheet!*' and their walking gait, the Twite being a hopping bird.

NOTE TO 'BIRDS BROWN ABOVE AND WHITE BELOW.'

PLOVER AND SNIPE KINDS.—All birds of the foregoing section are such as *perch* on branches and *hop* when on the ground. There is, however, a large class of birds, very distinctly 'brown above and white below,' which *never perch*, save by the rarest exception, and *never hop*. They are birds of the Snipe and Plover kind, all ground-birds, chiefly of the water-side, whether it be on marsh land, by the sea, or beside inland waters. All are pre-eminently *running* birds, using one foot after the other, and moving with a quick, gliding motion. As such, they have been relegated to separate sections headed 'SHORTER-BILLED RUNNING BIRDS' and 'LONG-BILLED RUNNING BIRDS.'

SAND-MARTIN.—The smallest of the Swallow kind, mouse-brown above and white below, with brown band across the chest. Described under 'SWALLOW AND SWALLOW-LIKE BIRDS.'

BROWN BIRDS WITH SPOTTED BREASTS.

MISSEL-THRUSH.—Form, similar to the Thrustle (plate 33). Length, 11 inches. Upper parts brown, with an ashy cast; under parts buffish, heavily marked with detached black spots. Resident.

Eggs.—4-5, greenish-white, blotched and spotted with reddish-brown and lilac; $1.25 \times .85$ inch (plate 124).

Nest.—Of dry grass, moss, and wool, lined with fine grass, and placed usually next the trunk of a tree, in a fork formed by a leading branch.

Distribution.—General throughout England, Wales, and Ireland; less common in Scotland, markedly so in approaching the north.

This is the largest member of the Thrush family. Unlike the smaller Thrustle, it does not frequent our gardens or skulk under cover; it is a bird of the open fields, seeking safety in flight rather than in hiding. When building, however, this bird, generally so wary, often places its nest in the fork of some low orchard tree, or elsewhere in the neighbourhood of man. It is seldom alone, a pair or a small family party hopping about irregularly in the grass fields or ploughed lands where they feed, pausing at times to assume a rigid, erect attitude indicative of acute attention. When disturbed, the

birds rise one after another, and fly in line to a common perch, generally some fairly high tree. The Missel-Thrush may be distinguished infallibly from its fellow Thrushes by its cry—a *harsh rattle*, and to this it gives utterance when sighting an intruder and whilst making its escape. It is a strong and, generally, high flier, 'breasting' (the word seems peculiarly appropriate to the flight of the Missel) the air as it lays its wings back after a series of rapid wing-beats ere bringing them into action again. By its wild, resounding song, heard in the blustering weather preceding spring, it has earned the title of 'Stormcock.'

FIELDFARE—10 inches. Winter visitor only. Lower back ash-gray, appearing very light between the brown of the upper back and wings and the blackish tail. Always in packs, all facing the same way when on the ground or perching. Cry, '*Uch-chu-chu-chut!*'

THROSTLE—9 inches; upper parts olive-brown; white central spot on breast. Cry, '*Tcheek!*' and a loud cackling.

REDWING—8½ inches; a very broad white stripe over the eye; flanks pronounced orange-red.

FIELDFARE.—Form, similar to Thrustle (plate 33). Length, 10 inches. Head and nape ash-gray; upper back and wings brown; lower back ash-gray; tail blackish; cheeks, throat, and breast ruddy-buff, with black streaks; remaining under parts, as well as the under sides of wings, white. Winter migrant.

Distribution.—General.

The Fieldfares come to us in flocks as winter migrants in October, and in flocks they remain until



MEADOW-PIPIT.



their return to the north in April. Although easily confounded by an inexperienced eye with their fellow-migrants the Redwings, or with our own breeding species, the Thristle and the Missel-Thrush, a little attention serves to distinguish them. The *light-gray lower back*, set between the brown of the upper back and the blackish tail-feathers, and the white underwings, often displayed during the bird's wheeling flight, are distinctive of the Fieldfare. When feeding on the ground or when perching on a high tree, as is their custom, the birds all face the same way. Before settling to feed or before perching upon a tree, they use an orderly wheeling flight. At times the whole flock rises from the trees in concerted flight, but as the birds proceed they straggle out until they cover a great area of the sky. Whether perching or flying, they constantly emit their very distinctive cry, '*Uch-chu-chu-chut!*' a subdued, conversational utterance more nearly resembling the chattering of Magpies than the call-notes of any of their fellow Thrushes. The Fieldfare's song is heard only where it breeds, in Scandinavia. While with us it keeps to the open country, feeding in the ploughed lands and pastures.

MISSEL-THRUSH—11 inches; lower back less prominently light, and tail light brown. Although they pack in autumn and winter in small companies, they neither face nor move in the same direction. When disturbed they rise successively, one following the other in a line. Cry, a harsh rattle.

THROSTLE—9 inches; upper parts olive-brown. Thrustles do not pack.

REDWING—8½ inches; broad white stripe over the eye; flanks deep ruddy-orange; underwings richly ruddy.

THROSTLE.—Plate 33. Length, 9 inches. Upper parts olive-brown; sides of face and under parts yellowish, thickly spotted with dark brown; a pure-white spot in the middle of the breast. Resident.

Eggs.—4-6, bright greenish-blue, glossy, spotted sparingly with sharply defined markings of black or brown; $1.0 \times .78$ inch (plate 124).

Nest.—Of dried grass, plastered inside with clay, cow-dung, and rotten wood, and placed in hedges, evergreens, against ivy-clad trunks and branches, and in hollows of walls and stream-banks, &c.

Distribution.—General.

This is the common 'Thrush,' which remains with us in greater or less numbers the year round. It is a constant visitor to our gardens during the hard weather, sneaking through the hedge-bottom, and drawing itself up 'at attention' ere hopping forward on to the grass. Pausing, with head tilted to one side, it awaits motionlessly some indication of the presence of a worm, and when it is given, darts upon the worm, and stands back with uplifted head in drawing it from its hole. If disturbed the bird darts under the first shrub, or stands, rigidly attentive, until satisfied that danger is past. When startled it flies to cover with a sharp '*Tcheek! tcheek!*' Although a skulker in shrubberies, the Thrustle is for the most part a bird of the open, and a ground feeder in meadows and ploughed lands. There, dotted about the fields, the birds seek the latent worm, their erect posture always suggestive of keen attention. This upstanding attitude lends the Thrustle, when seen nearly, an air of defiance, to which the moustachial

lines at each side of the bill add a certain look of contempt. Both qualities, however, are quite foreign to the timid nature of the Thristle. As a songster the Thristle is probably more in evidence than any other bird, and the song is generally delivered from a prominent perch, particularly at sunrise and sunset or during a shower. Mixed with short, rapturous phrases of the purest quality are squeakings and gabblings unspeakable. Still, whether it be good or bad, each phrase is generally repeated twice or thrice in succession with great exactitude, and this peculiar habit, with the wild, resounding nature of the song itself, often serves to identify the singer.

REDWING— $8\frac{1}{2}$ inches; broad white eyebrow; orange-red flanks.

MISSEL-THRUSH—11 inches; upper parts ash-brown. Cry, harsh rattle.

FIELDFARE—10 inches; ash-gray lower back in strong relief between brown of upper back and wings and blackish tail. Always in packs, facing the same way whether on the ground or perching. Cry, '*Uch-chu-chu-chut!*'

REDWING.—Form, plate 33. Length, $8\frac{1}{2}$ inches. Upper parts olive-brown, the wings darker and the tail lighter brown; a very broad white stripe over the eye; under parts white; the cheeks, chin, throat, breast, and sides of body spotted and streaked with dusky-brown; flanks pronounced ruddy-orange. Winter migrant.

Distribution.—General.

The Redwings come to us as winter migrants from

Scandinavia, arriving in flocks in October, and remaining so until their departure for the north in April. As they are similar in size and general appearance to our own Thristle, it is necessary to bear in mind that the Thristle never packs; that, while the *flanks* of the Thristle have a faint cast of olive-brown, those of the Redwing are *deep ruddy-orange*; that the underwing of the Thristle is buffish, whilst that of the Redwing is rich chestnut; and that the Thristle has nothing similar to the *broad white eye-stripe* of the Redwing. Except, however, that Redwings are always in flocks and seldom come near habitations, they have all the manners of the Thristle. They feed in the open fields in the same way, with the same startled movements and the same still, attentive posings. When disturbed they take refuge usually in a high tree, from which one after another slips in further flight, each uttering as it goes a subdued, whispering note. The song of the Redwing has been heard, and the bird has been stated to nest, in this country; but the occurrence is so rare as to be phenomenal. Breeding and singing go together, and the bird breeds in Scandinavia.

MISSEL-THRUSH—11 inches; flanks ruddy-buff; no prominent white eyebrow. Call, a harsh rattle.

FIELDFARE—10 inches; head, nape, and lower back ash-gray; tail blackish; flanks without deep orange-colour, and stripe over the eye much less prominent than in the Redwing. Cry, '*Uch-chu-chu-chut!*'

MEADOW-PIBIT.—Plate 34. Length, $5\frac{3}{4}$ inches. Upper parts olive-brown, mottled with black central streaks to the feathers, the wing-feathers having

pale edgings; buff eyebrows; under parts buffish-white, spotted with deep brown on breast and flanks; central tail-feathers dark, outer ones white. Resident.

Eggs.—4–6, grayish-white, or sometimes with a greenish or pinkish shade, mottled all over with dark brown; $\cdot78 \times \cdot57$ inch (plate 125).

Nest.—Of dry grass, lined with finer grass and hair, and placed on the ground under shelter of a tuft.

Distribution.—General.

A bird of the open, and to be met from the seaside, through grass and arable lands, up to the moor-top. It is also very partial to stream-banks and water-meadows. Although occasionally perching on trees or hedge-tops, it is pre-eminently a ground-bird. It is on the ground that it nests and feeds, tripping hither and thither with a walking gait, at each pause wagging its tail up and down like a Wagtail. Its flight is marked by spasmodic vibrations of the wings, alternating with intervals during which the wings are closed; it is therefore undulatory. It has also an aimless, erratic flight; and as the bird takes wing or whilst flying it emits a brisk '*Wheet! wheet!*' The outer tail-feathers are conspicuously white during the flight. The song begins in March, and though occasionally delivered from the ground or from some low perch, is generally accompanied by a distinctive flight. The bird mounts, with body almost erect, at a very sharp angle, to a height of about fifty feet, sometimes singing as it rises, at others beginning to sing only when turning to descend.

The note is a metallic '*Seeng! seeng! seeng!*' clear and incisive in the attack, but becoming more and more hurried and subdued as the song proceeds. When about to descend, the bird expands and erects its wings and tail, and, with these held rigidly fixed, sails down a long, shallow curve with a slow, gliding motion, singing as it descends. In spring and autumn the Meadow-Pipits band loosely together, scattering and gathering again with strange inconstancy.

TREE-PIBIT—6 inches; a habitual tree-percher, singing on its perch or rising thence for a song-flight similar to that of the Meadow-Pipit. The crown is flatter and the plumage brighter.

ROCK-PIBIT—6½ inches; exclusively a bird of the coast. Outer tail-feathers dusky-brown.

SKYLARK—7 inches; conspicuous crest; flight hovering rather than jerky. Alarm-note, musical '*Pr-r-r-r-r!*' Does not wag its tail; mounts incomparably higher.

WOODLARK—6 inches; no white outer tail-feathers; conspicuous white eyebrow; flight as preceding bird; does not wag its tail; is a tree-percher, and sings both perching and soaring.

TREE-PIBIT.—Form, like Meadow-Pipit (plate 34). Length, 6 inches. Upper parts pale brown, with dark centres to the feathers; double whitish wing-bar; wing and tail feathers dark brown, the outer tail-feathers white; under parts buffy-white, spotted with deep brown. Summer migrant.

Eggs.—4–6, variable, usually grayish or buffish white, mottled all over with reddish-brown; sometimes resembling the eggs of the Corn-Bunting, being purple-buff in the ground, clouded, streaked, and

blotched with rich umber-brown; $\cdot 82 \times \cdot 6$ inch (plate 125).

Nest.—Of dry grass, root-fibres, and moss, lined with finer grass and hair, and placed on the ground under cover of a tuft.

Distribution.—In England and Wales generally, except west Cornwall; in Scotland common in south-west, but increasingly rare towards the north; not in Ireland.

The Tree-Pipit in many particulars closely resembles the commoner Meadow-Pipit. In build and aspect one might pass for the other upon a cursory view, unless the rather brighter colour or the flatter crown of the Tree-Pipit caught the eye. In its jerky, undulatory flight, its nimble, walking gait, and the up-and-down oscillation of its tail while standing, the Tree-Pipit fully resembles the Meadow-Pipit. Their names rightly indicate their differences: the Tree-Pipit is a bird of the woodside, perching habitually on some favourite tree facing the open, and thence delivering his strong, sweet song. The usual perching song is '*Tiu-tiu-tiu-tiu-tiu-tiu-tiu-tiu-tree-tree-tree-tree-tree!*' the '*tree*' note being higher in pitch and much more drawn out than the opening notes. At times the metallic '*tree!*' becomes a clear, incisive '*wheet!*' at others, often during the flight-song, the '*tiu-tree*' strain is followed by a mechanical rattle such as the Common Wren uses, the song concluding with a long, thin, metallic note like the complaining note of the Red-breast during the breeding season. The song-flight is exactly the same as that performed by the Meadow-

Pipit, with the difference that the Tree-Pipit starts from and returns to his perch in the tree, whilst the Meadow-Pipit ascends from and descends to the ground.

MEADOW-PIPIT—5 $\frac{1}{4}$ inches; plumage duller and crest rounded; seldom perches on trees. Song, metallic '*Seeng!*' repeated with increasing speed during song-flight.

ROCK-PIPIT—6 $\frac{1}{4}$ inches; a coast-bird only; outer tail-feathers dusky brown.

SKYLARK—7 inches; only exceptionally settles on trees. Song, a prolonged carolling.

WOODLARK—6 inches; short tail; dusky outer tail-feathers; rounded crest. Although also a singer from tree-perch, maintains a prolonged carolling whilst soaring in the manner of the Skylark.

ROCK-PIPIT.—Form, like the Meadow-Pipit (plate 34). Length, 6 $\frac{1}{4}$ inches. Upper parts olive-brown, with dark centres to the feathers; wing and tail feathers dark brown; under parts whitish, with dark spots and streaks on the breast. Resident.

Eggs.—4-5, greenish-gray, mottled all over with ashy-brown; $\cdot 8 \times \cdot 6$ inch. There is also a reddish variety (plate 125).

Nest.—Of dry grass and seaweed, lined with finer grass, and placed on the ground among grass or bush growth on cliff-ledges.

Distribution.—General around the rocky parts of the coasts of the British Islands.

The Rock-Pipit is the largest and most solidly built of the Pipits, but is most readily identified by the facts that it is exclusively a bird of the coast, and has not the conspicuous white outer tail-feathers



SKYLARK.



of the Tree and Meadow Pipits. It is darker in plumage than the Meadow-Pipit, but resembles that bird in almost all other points. It walks; it wags its tail gently up and down when pausing; it flies with the same jerky, erratic motions; it has the same 'peeping' call-note; it mounts to sing, and as it rises emits a metallic '*Seeng! seeng! seeng!*' until, at a height of thirty or forty feet, it spreads its wings and tail out, and laying them rigidly back at an angle of about forty-five degrees, sinks with a slanting, slowly gliding flight to its rocky perch, emitting as it descends the same metallic note, but with ever-diminishing intervals and force, until the song dies out altogether as the bird alights. Like the Meadow-Pipits, the Rock-Pipits band together in winter, but even then they keep to the neighbourhood of the seashore.

MEADOW-PIPIT—5½ inches; outer tail-feathers white.

TREE-PIPIT—6 inches; a tree-percher. Song-flight similar to that of the Rock-Pipit, but song infinitely more varied.

SKYLARK—7 inches; conspicuous crest, causing it to appear square-headed in profile; flight hovering rather than jerky. Alarm-note, musical '*Pr-r-r-r-r-r!*' Does not wag tail. Song, prolonged carolling at great altitude.

WOODLARK—6 inches; a bird of the woodside, singing on tree-perch, or mounting thence to sing sustained song on the wing; tail very short and is not wagged.

SKYLARK.—Plate 35. Length, 7 inches. Upper parts mottled with light and dark brown; faint buffy streak over eye; wing-feathers with light edges and tips conspicuous during flight; central tail-feathers dark, outer ones white; under parts white washed

with brown, with dark streaks on throat, breast, and flanks. Resident.

Eggs.—3-5, dull gray, mottled with greenish-brown, sometimes forming a zone; $\cdot 94 \times \cdot 68$ inch (plate 124).

Nest.—Of dry grass, lined with finer grass, and placed on the ground under cover of a tuft or a clod.

Distribution.—General, but local in north Scotland.

The Skylark's continuous, resounding song, delivered on the wing at a great height, marks it off from every other bird except its kinsman, the Woodlark. It may be distinguished, however, from the latter at such a time by its more direct ascent, the Woodlark sweeping aside in broad arcs as it mounts. Both birds sing either on the ground or in the air, but whilst the Woodlark perches also on trees to sing, the Skylark very rarely does so. The tail of the Skylark is notably longer than is the case with the Woodlark, and during the bird's flight the outer tail-feathers show conspicuously white, whereas in the Woodlark the outer tail-feathers are dark. Both birds use a walking, not a hopping gait. Grass lands and ploughed fields are the haunts of the Skylark, and when disturbed he squats with puffed feathers, slack wings, and raised crest, rising reluctantly with a musical '*Pr-r-r-r-r!*' and flitting low to the ground. At times he hovers stationarily over a particular spot like a miniature Kestrel. He is a great lover of dust-baths, and is frequently to be met shuffling in the hot dust of the highways. In spring and autumn Skylarks are met in loose flocks,

and the song is to be heard during open weather, even in winter.

WOODLARK—6 inches; shorter tail; no white outer tail-feathers; fuller white eyebrow; rounded crest; perches on trees.

MEADOW-PIBIT—5 $\frac{3}{4}$ inches; a walker, but when it pauses wags its tail; also shows white outer tail-feathers in flight, but latter is performed in violent jerks, unlike plainer flight of Skylark. Call-note, a brisk '*Wheet! wheet!*' Crest rounded.

TREE-PIBIT—6 inches; motions on the ground and in the air as in the Meadow-Pipit; when flying exposes white side-feathers in tail; but when settled has also white, double wing-bar. When singing, rises from and returns to tree.

ROCK-PIBIT—6 $\frac{1}{4}$ inches; exclusively a bird of the coast; motions on the ground and during flight as in the Meadow-Pipit. Outer tail-feathers dusky-brown.

WOODLARK.—Form, similar to Skylark (plate 35), but with much shorter tail. Length, 6 inches. Upper parts ruddy-brown, with dark central streaks to the feathers; conspicuous white stripe over eye; tail black, tipped with white, the outer tail-feathers dusky-brown; under parts yellowish-white, streaked with black. Resident.

Eggs.—4-5, greenish-white, closely spotted and often zoned with dull reddish-brown and gray; $\cdot 83 \times \cdot 63$ inch (plate 125).

Nest.—Of grass, lined with finer grass, and placed on the ground under shelter of a tuft.

Distribution.—Very local; principally in some of the southern counties of England, becoming rarer from Midlands northward, until in Scotland it is all but

unknown. It has been known to breed in Counties Wicklow and Cork.

Like its kinsman the Skylark, the Woodlark nests, feeds, and sleeps on the ground, and there is little in its motions or general appearance to enable it to be distinguished upon cursory inspection from the former bird. Closer attention, however, reveals in the smaller bird a much shorter tail, a more conspicuous white eyebrow, and a rounded, instead of an angular, elevated crest. Although the Woodlark frequents grass and arable lands, it is a denizen of the woodside, perching habitually upon some chosen tree, and singing from its perch, or launching itself to mount skywards, carolling like the Skylark. Its manner of mounting, however, differs from that of the latter bird in that it is characterised by wide circling movements as the bird ascends. The song, too, although a sustained carolling in both birds, is in the case of the Woodlark less vehement, less checked by certain harsher notes to be heard in the performance of the Skylark, and is delivered at an inferior altitude.

SKYLARK—7 inches ; fainter eyebrow ; outer tail-feathers white ; angular crest.

TREE-PIBIT—6 inches ; seldom rises higher than forty feet from its perching tree, then breaks back, singing, to its perch. Outer tail-feathers white.

MEADOW-PIBIT—5 $\frac{3}{4}$ inches ; outer tail-feathers white ; wags its tail ; rarely perches on trees. Cry, '*Wheet ! wheet !*' Flight jerky and undulating. During song-flight seldom ascends higher than fifty feet, after which descends immediately, singing, to the ground.

ROCK-PIBIT—6 $\frac{1}{4}$ inches ; exclusively a bird of the coast. Flight and song-flight similar to those of Meadow-Pipit.



CORN-BUNTING.

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CORN-BUNTING.—Plate 36. Length, 7 inches. Upper parts light brown, with dark central streaks to the feathers; wing-feathers brown, with paler edgings; tail-feathers almost uniform brown; under parts dull white, with dark spots and streaks; bill conical. Resident.

Eggs.—4-5, pale buff or gray in the ground, suffused with purplish-brown, and boldly blotched and streaked with medium and dark reddish-brown; 1.0 × .7 inch (plate 124).

Nest.—Loosely made of straw, dry grass, and root-fibres, lined with hair, and placed well out in fields of corn, grass, or clover.

Distribution.—Local throughout the British Isles.

The Corn-Bunting is the largest of our Buntings—a lethargic, droop-tail community. As there is nothing distinctive in his appearance, he is to be identified rather by his habits and song. He sits inertly for hours together upon a hedge-top, a branch (preferably a bare one), or on a telegraph wire, uttering at leisurely intervals, without effort or gesture of any kind, a never-varying song. After three or four stuttering notes exactly resembling one another, there follows a peculiar long-drawn note that has been likened to the jingling of a chain or to the sound of breaking glass. There are probably only three long-drawn notes with which it might be confounded—the sustained whistle of a Starling, which, being a true whistle, resembles it in no way but its length; the ‘scream’ of the Greenfinch, which, however, lacks introductory notes; and the long, terminal note in the song of the Yellowhammer. But this last, though

similarly preceded by some six or seven detached notes, is distinctly melancholy in its modulation, whilst the final note of the Corn-Bunting is purely mechanical in quality, and has a shivering, tinkling character quite different from the nasal drawl of the Yellowhammer. The Corn-Bunting lacks the white side-feathers so conspicuous in the tails of the Buntings when flying, and is somewhat Lark-like in its general aspect. It nests in grass and affects hedge-bordered and tree-dotted grass lands, associating in autumn with the bands of Finches that feed in the stubble-fields.

WRYNECK.—Plate 37. $7\frac{1}{2}$ inches. Upper parts brownish-gray, finely speckled and mottled with black, brown, buff, and gray; sides of head, throat, and fore-neck pale buff, with dark cross-lines; a dark patch on the ears; breast and belly white, with dark arrow-head marks; wings and tail barred transversely. Summer migrant.

Eggs.—7–10, pure white; $\cdot 8 \times \cdot 6$ (plate 125).

Nest.—A hole in a decaying tree not far up the trunk, the bedding being the rotting wood itself.

The Wryneck occurs chiefly in the south and south-eastern parts of England, and is rare or absent from the midland counties northwards. Arriving in April, it betakes itself to gardens and orchards, parks and woods, where it announces its advent by its frequently uttered call, '*Pee!*' repeated many times in succession, and diminishing in speed, volume, and pitch to its rather melancholy close. Occasionally the bird

creeps like a Woodpecker up the trunk of a tree in its search for ants, which it licks up with a lightning flick of its extensile tongue. With the same object in view it may oftener be seen on the ground where ant-hills are. While thus engaged, the Wryneck writhes its flexile neck about with rapid and apparently violent motions used by no other bird. Although at such times the neck seems unduly long, the bird as a whole is of the somewhat 'stumpy' build of habitual trunk-climbers. The Wryneck practises perching like that other soft-tailed, trunk-climbing bird, the Nuthatch, and is far less given to trunk-climbing than the stiff-tailed Woodpeckers. Still, its eggs are placed, like those of the Woodpeckers, in a cavity in the trunk of a tree.

TREE-CREEPER—4 $\frac{3}{4}$ inches. Also a bird of very finely variegated plumage, and also—but exclusively—a trunk-climber; much smaller than the Wryneck, and with under parts silky-white; bill slender, curved.

NOTES TO 'BROWN BIRDS WITH SPOTTED BREASTS.'

CURLEW.—21–26 inches. Moorland breeder and shore feeder; brown above and spotted white below, with enormous curved bill. See under 'BIRDS WITH LONG, CURVED BILLS.'

WHIMBREL.—17 inches. Marked like the above, and having similarly large, curved bill. A shore and inshore feeder on migration. See under 'BIRDS WITH LONG, CURVED BILLS.'

HAWKS, FALCONS, HARRIERS, BUZZARD, OWLS.—Many of these are 'brown birds with spotted breasts,' usually having heavy, dark streaks on the whitish under parts; but they are for the most part much larger birds, ranging from 1 to 2 feet in length, whilst those of the foregoing section measure from 5 $\frac{3}{4}$ to 11 inches. Further, all birds of prey have stout, hooked bills, and the males in many cases have the upper parts of a deep slaty-blue. They are described severally under 'HAWKS AND HAWK-LIKE BIRDS,' 'EAGLES AND EAGLE-LIKE BIRDS,' and 'OWLS AND OWL-LIKE BIRDS.'

RUDDY-BREASTED BIRDS.

WHEATEAR.—Plate 38. 6 inches. Crown, hind-neck, and back blue-gray; eyebrow white; black stripe through the eye; wings and tail black, except several of the outer tail-feathers, which are white at the base; rump also white; under parts white, warm buff on the throat and breast. Male in autumn, and female at all times, brown above. Bill and legs black, the former sharply pointed. Summer migrant.

Eggs.—5-7, pale greenish-blue, sometimes with minute purplish specks at the larger end; $\cdot 8 \times \cdot 6$ inch (plate 125).

Nest.—Of dry grass, lined with wool and hair, and placed in rabbit-burrows, in the interstices of cairns, stone walls, or peat-stacks, or on the ground under shelter of stone or clod.

Distribution.—General.

The Wheatear is usually the first of the summer migrants to arrive in the British Islands, where it remains from March until September. It distributes itself over moorland and by the seashore, nesting in rabbit-burrows, stone piles, peat-stacks, or in the shelter of a clod—in short, in a hollow of some sort in, on, or near the ground. It is not possible to overlook the Wheatear, for he remonstrates ere one has really invaded his domains. Perching on a stone or clod or low mound, he dips his head and flirts his tail excitedly, crying '*Chat-chat-ee!*' without cease.

Plate 38.



WHEATEAR.

Plate 39.



WHINCHAT.
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He continues to recede before the intruder, flitting from stone to stone and from clod to clod, ever remonstrating, the *rump and base of the tail flashing conspicuously white* as the bird flies hurriedly a little above the surface of the ground. In his low flight, his way of drawing himself up with tightly dressed plumage, rocking his tail the while, the Wheatear is very like the Robin. Unlike that bird, he rarely perches on trees. His song is so slight as to be useless for purposes of identification. During March and April the Wheatears drift northwards across the country, and southwards again about the end of September; but although they arrive in this country from over sea in great companies, and assemble in great numbers on the South Downs ere crossing the sea on the return journey in autumn, Wheatears never pack save for the sea-passage.

WHINCHAT— $5\frac{1}{4}$ inches; brown above, mottled with darker brown; broad white eye-stripe; under parts yellowish-red; outer tail-feathers white at base as in the Wheatear; lacks the latter's conspicuous white rump. Occurs in ploughed lands during migration, but nests usually in grass fields. Note, '*U-tick!*'

REDSTART— $5\frac{1}{2}$ inches; upper parts blue-gray, but breast, base of tail, and most of tail-feathers brilliant orange-chestnut. Perches on branches, but occurs in ploughed lands on migration. At all times distinguished during flight by brilliant tail-feathers.

WHINCHAT.—Plate 39. Length, $5\frac{1}{4}$ inches. General colour of upper parts brown, streaked with darker brown; distinct black patch on shoulder, with white spot above it; centre tail-feathers dark; outer tail-feathers white except at ends, which, being dark,

complete a broad, dark terminal band; sides of face blackish; throat, sides of neck, and a broad band over the eye white; breast yellowy-red. Summer migrant.

Eggs.—4-6, greenish-blue, occasionally minutely spotted with reddish-brown at the larger end; $\cdot 72 \times \cdot 6$ inch (plate 125).

Nest.—Of dry grass, lined with root-fibres and hair, usually tucked in a hollow in the ground among thick grass or beneath a small bush.

Distribution.—England (local in west) and Wales; fairly general in Scotland; north of Ireland, passing through the south on migration.

It will thus be seen that the Whinchat is highly variegated in its markings, which include very distinct black and white patches, especially noticeable when the tail is spread in flight. But the surest mark is the broad white eye-band. *No other bird has so heavy a white eye-band*, unless it be the Redwing, which, however, visits us only in winter, and is a considerably larger bird and like our Thrustle. The Whinchat recalls the Redbreast by the sprightly manner in which it mounts and vacates its perch—some stone or clod, or low post, branch, or rail—turning now one eye, now the other, in scrutiny upon the intruder. In the ploughed fields its motions are those of the Wheatear. It will dart up, capture a passing insect, and break back to its perch, in the manner of the Flycatcher. Its habit of rummaging in the grass, hovering over or perching upon some stouter weed, is its own, and foreshadows the time when it will build its nest

in the grass in the shadow of a hedge, beneath a furze-bush, or among the heather. Its song, delivered from a tree or occasionally, in spring-time, on the wing, is like the Thristle's, but on a smaller scale, consisting partly of liquid notes and partly of harsh sounds like the low grumbling of the White-throat, whilst the call-note, '*U-tick! u-tick-tick!*' is inserted from time to time. All the Whinchat's movements are abrupt; the flight is low and hurried; the bird is ever alert.

STONECHAT.— $5\frac{1}{4}$ inches; ruddy breast and white base of tail like Whinchat, but head and throat black; lacks the white side-feathers in the tail and the broad white eye-band.

STONECHAT.—Plate 40. $5\frac{1}{4}$ inches. Head, throat, back, wing and tail feathers black or blackish, except bold white patch on wing and white patch covering insertion of tail; sides of neck white; breast ruddy-orange. Resident.

Eggs.—5-6, pale bluish-green, speckled minutely with reddish-brown, mostly at the larger end; $\cdot 7 \times \cdot 58$ inch (plate 125).

Nest.—Of dry grass and moss, lined with hair and feathers, and placed in a hollow in the ground among thick herbage, or at the root of a furze-bush.

Distribution.—General throughout the British Isles in suitable places, the bird in winter seeking the milder parts or migrating abroad.

A very boldly marked little bird, and an inhabitant of furze-grown commons and similar situa-

tions. His wholly black head, bold white patches at the sides of the neck and on the wings, and his ruddy breast render confusion with any other bird impossible. Another characteristic facilitating identification is his call-note, 'U-tack! u-tack-tack!' for he will use it immediately his retreat is invaded, perching on the top of some low bush, and continuing to flit from bush to bush with a low, rapid flight as the intruder advances. When undisturbed he perches silently and still upon some prominent twig, anon flitting suddenly to earth and up again, darting into the air to catch some passing insect, and breaking back to his perch in the manner of the Flycatcher, or searching the grass for food like a Whinchat. *The Stonechat is the only ruddy-breasted land-bird with a head entirely black.*

WHINCHAT—5½ inches; bold white band over eye; outer tail-feathers conspicuously white, except tips; white patches at sides of neck and on wings smaller, but white patch covering insertion of tail larger. Call-note very similar.

BULLFINCH—6 inches; has a black cap only, the sides of the face and neck, and the throat, being red, whereas the Stonechat has head, neck, and throat wholly black. The Bullfinch has a short, blunt bill; the Stonechat, a relatively longer and sharply pointed bill.

REDSTART.—Plate 41. 5½ inches. General colour of upper parts bluish-gray; forehead white, running back in a white line over the eyes; sides of face, throat, and front of neck black; large wing-feathers dark brown; breast, rump, and tail-feathers (except two central ones, which are dark) brilliant orange-







chestnut; under parts whitish, washed with orange. Summer migrant.

Eggs.—Usually 6, at times more, pale greenish-blue; $\cdot 7 \times \cdot 55$ inch (plate 125).

Nest.—Of dry grass, moss, and rootlets, lined with hair and feathers, and placed in a hole in a tree or a wall, and in similarly sheltered recesses in out-buildings.

Distribution.—Throughout Great Britain, chiefly in the south, but rare in the south-west and Pembroke-shire; less common in Scotland, and very uncommon in Ireland.

The Redstart is most generally observed in spring when, as a migrant, it drifts across the country, frequenting hedgerows, the woodside, and the ploughed fields in its passage. When seen perched, with rocking tail, on some low branch, post, or rail, it recalls the Redbreast by its pose and ruddy breast, and the Wheatear by its closely dressed plumage and blue-gray upper parts bordered by the dark bands formed by the closed wings. But the identification of this bird need depend upon no other feature than the *broad flash of brilliant orange-chestnut as it darts with expanded tail-feathers* along the hedgerow, from its perch to the ground and up again, or into the air to snap up a passing insect. No other bird has anything resembling this display of the 'Firetail,' as the bird is sometimes called. From the open it retires to quiet gardens, orchards, woods, or ivy-clad ruins, building its nest in holes of trees and walls, or similar out-of-the-way corners. Its song is a slight but sweet warbling. Redstarts have a

peculiar shivering motion of the tail, practised always just after alighting.

YELLOWHAMMER— $6\frac{1}{2}$ inches. A bird that shows fairly bright chestnut on the lower back during flight, but the outer tail-feathers are conspicuously white, and the bird itself is for the most part yellow.

REDBREAST (ROBIN).—Plate 42. Length, $5\frac{3}{4}$ inches. Upper parts olive-brown; wing and tail feathers dark brown; breast bright red, with a blue-gray tract on each side; centre of breast and belly white; flanks brown; bill narrow, pointed, dark; legs dark. Resident.

Eggs.—5–7, white, softly clouded and spotted with pale ruddy-brown; $\cdot 8 \times \cdot 6$ inch (plate 125).

Nest.—Of dry grass, moss, and leaves, lined with hair and some feathers, and placed in a hole in trees, walls, banks, in derelict pots and pans, and the like.

Distribution.—General.

Brown above, white below, and red in front, the Redbreast is more boldly and simply marked than any other ruddy-breasted bird. He is with us throughout the year, a constant visitor to our gardens in winter, but drawing off to some extent in spring to nest in hedge and ditch banks, holes in trees or ivy-clad walls, and a hundred curious situations having the common feature that they afford a hollow shelter for the nest. He is well known as a nester also in outhouses. When on the ground the Redbreast hops; when perched—generally on some

low branch, post, or rail—he is given to frequent bobbings of the head and flirtings of the tail; but whether on the ground or perching, in the pauses of his movements he holds himself with a haughty mien, observing with a fixed, sidelong glance of his large, round, dark eye anything which may have caught his attention. Except during the autumn moult, he sings throughout the year—a pure, varied warbling, delivered with defiance when, in spring, he contends with a rival; but when, in winter, the Robin, observed but unobserving, faces the dull, dead days from leafless bough or frosted rail, the defiant air is gone, and, withdrawn as it were into himself, the bird soliloquises with a subdued simplicity infinitely sweet and sad, so that some have been known to avoid him at such times. There is no ruddy-breasted bird that sings throughout the year but the Robin. Common notes of the Redbreast are an incisive ‘*Tet!*’ repeated several times; and a high-pitched, complaining note, long-drawn and of piercing tenuity.

BEARDED TITMOUSE.—Plate 43. $6\frac{3}{4}$ inches; tail, $3\frac{1}{2}$ inches. Head blue-gray, with black moustaches; upper parts and tail bright ruddy-brown, with white pattern on the outer tail-feathers; under parts whitish, tinged with rose-colour on the throat and breast; wings bright brown, patched with white and black. Resident.

Eggs.—5–7, glossy-white tinged with cream, with a few fine wavy streaks of reddish-brown; $\cdot 7 \times \cdot 55$ inch (plate 125).

Nest.—Of dead leaves of sedges and reeds, lined with reed-heads, and placed (not suspended) near the ground among rushes or coarse grass.

This beautiful bird, now become very rare, occurs only in the reed-beds of the Norfolk Broads. The situation, the bright colouring of the bird, the conspicuous moustaches or 'beard'—a wisp of black feathers at each side of the bill, set in high relief by the white of the throat—and the inordinately long tail, itself as long as the body of the bird, preclude the possibility of confusion.

LONG-TAILED TIT— $5\frac{1}{2}$ inches, of which the tail constitutes more than half. Head and throat white, with black stripe over the eye; hind-part of neck and back black, with rosy patch on each shoulder; lower back also rosy; wings and tail black, the outer feathers of the latter partly white; under parts rosy. Nests and feeds in bushes and trees.

LONG-TAILED TIT.—Plate 44. $5\frac{1}{2}$ inches, of which the tail alone measures more than 3 inches. Head and throat dull white; stripe over the eyes black; hind-neck and upper back black, with a rosy patch on each shoulder; lower back also rosy; wings and tail black, the outer feathers of the latter partly white; under parts rosy. Resident.

Eggs.—7–10, or more, white, speckled with reddish-brown about the larger end; $\cdot 53 \times \cdot 42$ inch (plate 125).

Nest.—Oval, with a hole at the side, formed of moss, wool, and spiders' webs, covered with silvery lichens outside, and lined profusely with feathers. It is placed usually in a thick hedge, but also in



REDBREAST.





BEARDED TIT.

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holly and furze bushes, and sometimes higher in lichen and ivy clad trees.

Distribution. — General throughout England and Wales; less common in Scotland; common in Ireland.

The Long-Tailed Tit is resident in and generally distributed throughout the British Islands, being commoner, however, in England, and rare in the north of Scotland. Black, white, and pink are its peculiar colours, and when it is stated that the tail is longer than the body, it will be recognised that this species is sufficiently easy to identify. In fact, it is as tiny a bird as any in our islands save for its inordinately long tail. Building a remarkable moss nest, egg-shaped, with a circular opening at one side near the top, the bird places it, usually not high, in a thorn-hedge, a bush, or tree, as a rule in or near a wood or copse. Here the birds move much in the higher branches, using all the topsy-turvy antics that characterise the Tit tribe generally, but being sufficiently distinguished by their long tails and the necessity they are under, owing to the extreme shortness of their bills, of applying them closely to the bark from the crevices of which they extract the insect-food upon which they subsist. But they are more readily observable in winter when, in small parties consisting of birds of their own species, or in the company of Golderests or of some of the Tits, they canvass the garden trees and shrubs, their vibrant '*Zee! zee!*' being sounded whenever a bird passes from one tree to another. As it does so the white of the outer tail-feathers is particularly conspicuous. The only other common British birds

having tails at all resembling those of the Long-Tailed Tits, by reason of their length and the conspicuously white outer tail-feathers, are the Wagtails; but the Wagtails are 7-inch birds, and ground-feeders.

BEARDED TIT—6 $\frac{3}{4}$ inches; tail, 3 $\frac{1}{2}$ inches. Head blue-gray, with black moustaches; upper parts and tail bright ruddy-brown, with white pattern on the outer tail-feathers; under parts whitish, tinged with rose on the throat and breast; wings bright brown, patched with white and black. A very rare bird, occurring now only in the reed-beds of the Norfolk Broads.

RED-BACKED SHRIKE.—Plate 45. 7 inches. Head and nape bluish-gray, *a broad, black band passing across each eye*; upper parts chestnut, becoming gray towards the tail; wings dark brown, with ruddy edgings to the feathers; tail black, but white at the base of all but the central feathers; under parts pink; bill (hooked) and feet black. *Female*: upper parts and tail brown, latter without white side feathers, but tipped buffish; below, buff instead of pink, barred with brown. Summer migrant.

Eggs.—4-6, variable, some having cream ground, broadly zoned about the larger end with confluent blotches of yellowish-brown and gray; others having a greenish or pinkish ground-colour; .88 × .65 inch (plate 125).

Nest.—Of dry grass, roots, and moss, lined with fine grass, wool, and hair, and placed usually in a thorn-hedge.

Distribution.—Southern and central England up

to south-east Yorkshire, thence northward rare and irregular; Wales; not in Ireland.

The Red-Backed Shrike arrives in the south of England early in May, and is a fairly common bird there in wooded districts during summer. Having no song worthy of the name, this bird is fortunately sufficiently singular in form, colouring, and habits to render it easy to identify. The bill, slightly hooked and notched, looks like a hawk-bill in an incipient stage, and it is put to hawk-like uses in preying upon beetles, bees, mice, lizards, and small birds. In a district affording the bird such sustenance, it will use a high hedge or wooded slope for nesting purposes. Perching at the hedge-top or in some equally dominating situation, it watches the ground with that attentive inclination of the head common with Shrikes, and upon sighting prey, pounces down upon it, and having devoured it, returns to its perch. If its prey be not readily edible, the bird bears it to some solid support and, holding it down with one foot, tears it up like a hawk. At times the Shrike carries its catch to a thorn—often its nesting-bush—and rams it home on a long spine, then tears off pieces in a direction at right angles to the axis of the spine. Some of its captures are not eaten at once, and go to form those ‘larders’ of impaled insects, &c., which have caused the Shrike to be called the Butcher-Bird. At times this bird makes long or high excursions into the air to capture some larger insect on the wing. When attacked by other birds (those of the Swallow tribe habitually harass it) it uses a low, chattering note like that of a Kestrel. It has also a percus-

sive single note. Some of the Red-Backed Shrike's foreign relatives at times straggle across to the British Isles, but among regular British birds there is none resembling it in its striking colouring and markings, and none of approximately its own size with a hooked bill.

HAWFINCH.—Plate 46. Length, 7 inches. Head, face, and rump fawny-brown; the back darker brown; nape gray; throat and small patch about the eye black; breast vinous-brown; wings black, with bold white patch; central feathers of tail brown; others blackish, with white tips; bill conical and extraordinarily massive. Resident.

Eggs.—4–6, pale green or buff, streaked with gray and spotted sparingly with blackish-brown; $1.0 \times .7$ inch (plate 125).

Nest.—Of twigs and lichens, lined with fine roots and hair, and placed from a few feet to thirty feet above the ground, in old thorn-bushes, apple and pear trees, or on the horizontal branches of oaks, beeches, and firs.

Distribution.—Fairly common in south-eastern England, rarer northwards, absent from Cornwall; rare in Wales save in Brecon; practically unknown in Scotland and Ireland.

The Hawfinch is a bull-necked, stout-billed bird, and because of its wary habits harder to see than to recognise. There is none of the smaller perching birds with so powerful a structure as the bill of the Hawfinch, used, as it is, to break open fruit-stones in

Plate 44.



LONG-TAILED TITMOUSE.



RED-BACKED SHRIKE.



order to extract the kernels. This bird nests in hedgerows, or at a moderate height in orchard and other trees—I have found the nest in a thorn a few feet above reach—in the neighbourhood of copse or garden. It is a seed-eater, and is notorious for its depredations among the peas. In autumn the association of the birds in family parties, and later in general bands, brings them more into notice. The song of the Hawfinch is insignificant, but its call—a long-drawn whistle delivered four times in succession—is quite distinctive. At first, however, the bird will probably be identified by means of the massive head and bill, the latter in summer being of a livid blue, and in winter of a buffy-white.

BULLFINCH—6 inches. Although ruddy-breasted and approaching the thick-necked appearance of the Hawfinch, the Bullfinch has a well-defined black cap, a tail entirely black, and a short bill, rather like a Parrot's.

CHAFFINCH—6 inches; ruddy-breasted, but lacks the Hawfinch's thick-set appearance and massive bill; is a brilliant songster, whose call is '*Pink! pink!*'

CHAFFINCH.—Plate 47. 6 inches. Forehead black; crown and nape slate-blue; back chestnut; lower back green; wings black, with two white cross-bars; tail black, except two centre feathers gray, and outer feathers boldly marked with white; breast wine-colour; remaining under parts whitish; stout conical bill. *Female*: crown and upper back olive-brown; lower back green; under parts olive-gray; rest as male, but less vivid. Resident.

Eggs.—4–6, pale grayish-blue, clouded with pale reddish-brown, and having large detached blotches,

'bleeding' at the edges, of purplish-brown or raw sienna; sometimes, however, almost unmarked; $\cdot 8 \times \cdot 57$ inch (plate 125).

Nest.—Compact, of green moss, wool, and lichens, lined with hair and feathers, and placed in a hedge or bush, in the fork of a branch against the main-stem of a tree, or out on a horizontal branch.

Distribution.—General.

Nesting in hedgerow, garden, copse, and woodside, the Chaffinch is widely distributed, and may be seen at all times of the year. Unless engaged in song—a powerful, rattling, but unchanging strain ending with two notes, '*Whit-iu!*'—the bird is almost sure to greet the approach of an observer with a loud, metallic '*Pink! pink!*' recalling the cry often used by the Blackbird. When the Chaffinch is perching, the full, red breast first strikes the eye; during flight the white portions of the wings and tail become conspicuous. When hopping on the ground, usually on open ways, where he largely seeks his food, the Chaffinch exhibits a combination of colours which for brilliancy and contrast is second to none among even the brightly coloured Finches. Like the Redbreast, the Chaffinch takes his stand upon some prominent branch to deliver his song; but while the song of the former is never twice the same, that of the Chaffinch never varies, and in the 'smashing' energy of its delivery is unapproached by that of any other ruddy-breasted bird. The Redbreast sings practically all the year, the Chaffinch only from March until June. Chaffinches are to be met feeding together in family parties in late summer, and later still in bands of

considerable number, these bands sometimes consisting of birds of one sex only.

BULLFINCH—6 inches. Although the male has a full, ruddy breast, a sharply defined black cap distinguishes both the male and female from the Chaffinch; tail-feathers wholly black.

HAWFINCH—7 inches; crown, cheeks, and back fawny to brown; throat black. A thick-set bird, with massive conical bill.

BRAMBLING—6½ inches; lower back white.

BRAMBLING.—Plate 48. 6½ inches. Head, back, and part above the insertion of the tail variegated, with dark centres and ruddy edgings to the feathers; rump white, mottled with black; breast and fore-part of wing orange-chestnut; wings and tail black, with lighter margins to the feathers, the wings having a broad black patch between two white cross-bars; under parts white, mottled on the flanks; bill yellow, with black tip. Winter migrant.

Distribution.—A winter migrant on the north-eastern coast of England, and less regularly and abundantly to the east coast of Scotland; more or less numerous farther south according to the severity of the winter; increasingly rare westwards in both countries; an irregular visitant to Ireland, although known to have appeared exceptionally in large bands and at long intervals in the north-east.

The plumage described above is that of the Brambling when it visits us as an autumn immigrant from Scandinavia, the chief difference between this and the breeding plumage being the absence of the fine black head and mantle with which the male

returns northward in spring. The Brambling resembles its congener the Chaffinch in the brilliancy and boldness of its markings, but by its *white lower back*—very conspicuous during flight—may be at once distinguished from that bird. Feeding chiefly upon beech-mast and alder-seeds during its sojourn with us, the Brambling is to be sought in the neighbourhood of beech woods, where they collect in small flocks, often in the company of Chaffinches. The song of the Brambling is not heard in this country.

CHAFFINCH—6 inches; lower back and rump olive-green instead of white.

LINNET.—Plate 49. $5\frac{3}{4}$ inches. General colour above, ruddy-brown streaked with darker brown, except nape and sides of neck, which are grayish; wing and tail feathers dark, with white edgings; chin and throat white, streaked with brown; forehead, crown, and breast crimson; belly buffy-white; bill conical, lead-colour. Resident.

Eggs.—4–6, bluish-white, spotted with light reddish-brown and relieved by a few dark spots and streaks; $\cdot 7 \times \cdot 53$ inch (plate 125).

Nest.—Of twigs, dry grass, and moss, lined with wool, hair, seed-down, and feathers, and placed usually in gorse-bushes, but sometimes in thorn-hedges.

Distribution.—General throughout the British Isles, except in mountainous tracts of Scotland, where it is replaced by the Twite.

As the female Linnet has not the crimson forehead and breast of the male, and they are present in the

Plate 46.



HAWFINCH.

Plate 47.



CHAFFINCH.

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male in summer only, there is little left that is distinctive. The *grayish cast of the hind-part of the head and the neck*, however, is in clear contrast to the ruddy-brown of the wings and back. The Linnet nests principally in gorse-bushes, and occasionally in broom or heather, and is to be looked for in summer in the open lands where these grow. It uses freely a twittering note, and during the breeding season the male indulges in a short song-flight, uttering a gentle trilling that may be referred to that of the Canary as a well-known type. Being a perennial seed-eater, the Linnet is at all times to be seen hopping among grasses and weeds. In autumn and winter Linnets collect in bands, which rove about in high, rapid flight, incessantly twittering as they go. The forked tail then shows plainly against the sky. During their quick flight the birds break aside erratically, now in one direction, now in another, finally scattering out and shooting suddenly to earth with a directness and velocity that are characteristic of the Linnet. They are little given to perching in trees.

TWITE—5 inches; in form and general colouring resembling the Linnet, but distinguished by its yellow bill.

LESSER REDPOLL—4 $\frac{3}{4}$ inches; in form and general colouring resembling the Linnet, but has black forehead and conspicuous black chin-patch.

GREENFINCH—6 inches; like the Linnet in form and habits, but greenish, with bright-yellow patches on the wings and tail.

PIPITS.—Although similarly streaked-brown above and streaked-white below, frequenting open situations, banding together and calling to one another on the wing, and using a high, erratic flight, Pipits may be distinguished by their longer, sharper bills, their note, '*Wheet! wheet!*' and walking gait, Linnets being hopping birds.

LESSER REDPOLL.—Plate 49. Length, $4\frac{1}{2}$ inches. Upper parts dark brown, with warm brown edgings to the feathers; rump (in summer) rosy; wings and tail dark brown, with lighter edgings to the feathers, the wings having warm buff cross-bars; crown crimson; small patch before the eye and chin black; breast (in summer) rosy; sides of body ruddy-brown streaked with dark brown; belly dull white. Female lacks the red markings. Resident.

Eggs.—4–6, blue, spotted and blotched with pale purply-brown, and having a few spots and streaks of deep red-brown, often forming a zone; $\cdot63 \times \cdot48$ inch (plate 125).

Nest.—Of twigs, grass, and moss, lined with seed-down, hair, and feathers, and placed usually, a few feet to a few yards from the ground, against the stem of a birch-tree; also in willows and alders; in short, in many kinds of bushes and low trees growing on moss-lands.

Distribution.—General, but rare in south-western England.

This bird is a small Linnet, confined as a breeding species to the north of a line drawn from Norfolk to Shropshire, though breeding sparingly in some more southerly situations. In winter it is more generally distributed. The Lesser Redpoll—so called to distinguish it from the rather larger Mealy Redpoll, a winter migrant from the Continent—is distinctly of a northerly type, affecting birch woods or plantations of conifers as breeding-sites, but in default of these making shift with high hedges, fruit-trees, or shrubs. In autumn the birds begin to move about in small

parties, and when engaged in seeking their seed-food, often in birch or alder, their habit of hanging on to the branches with all sorts of eccentric postures recalls the topsy-turvy antics of the Tits, of which birds, as also of Siskins, they are occasionally foraging companions. For the most part, however, they keep themselves to themselves, and in autumn may also often be met flitting about the open, feeding upon the seeds of ground plants. The song is a short, shrill trill, the call a caressing note, and the alarm-note a hard chirp, all of which resemble similar but mellow notes of the Common Linnet.

MEALY REDPOLL—5 inches; closely resembles the Lesser Redpoll in all respects, but grayish streaks give to the upper parts the 'mealy' paleness distinguishing them from the darker and warmer brown of the upper parts of the Lesser Redpoll.

LINNET—5 $\frac{3}{4}$ inches; visibly larger than the Redpoll; almost exclusively a bird of the open country, feeding on the ground; grayish head; no black on face or chin.

TWITE—5 inches; a bird of the moors and mosses; paler brown above, and showing when flying white edgings to the wing and tail feathers; no black on face or chin.

MEALY REDPOLL.—Form, like Lesser Redpoll (plate 49). Length, 5 inches. Upper parts dark brown streaked with grayish-white, notably the rump (this last in summer flushed rosy); wings and tail-feathers dark brown, light-edged, the wings with a white cross-bar; patch before eye and chin black; fore-crown and breast red (hidden in winter by grayish edgings to feathers); belly dull white, with dark streaks on flanks. Winter migrant.

Distribution.—A winter migrant to the Shetlands

and along the east coast of Scotland and England as far as Durham; occasionally farther south and west.

The Mealy Redpoll, a bird of even more northerly type than the Lesser Redpoll, resembles the latter as closely in habits as in appearance, and where they occur Mealy Redpolls associate with Lesser Redpolls, feeding upon the seeds of the same ground plants and trees as they. The 'mealy' grayishness of the upper parts sufficiently distinguishes the Mealy Redpoll from the Lesser Redpoll even if the bulkier form of the former escape notice.

LINNET—5 $\frac{3}{4}$ inches; gray nape; no black on face or chin.

TWITE—5 inches; hair brown above, streaked with dark brown; white in wings and tail conspicuous during flight; no black on face or chin; bill yellow.

CROSSBILL.—Plate 50. Length, 6 $\frac{1}{2}$ inches. Entire head and body red; wings and tail brown. *Female*: yellowish-green in place of red. Mandibles hooked and crossed. Resident and winter migrant.

Eggs.—4-5, white faintly tinged with green, marked sparingly with two shades of reddish-brown; .9 × .66 inch (plate 125).

Nest.—Of roots and dry grass upon a base of twigs, lined with a little moss and a few feathers, and placed, usually at a considerable height from the ground, on the branch of a fir, as a rule close to the trunk.

Distribution.—Principally in pine woods of Scotland; also in similar situations in Ireland; England



BRAMBLING.



LINNET. LESSER REDPOLL.



from Lake District northwards; elsewhere rare and irregular. More generally diffused in winter.

The Crossbill is for the most part a winter visitant, sometimes in great numbers, to the British Isles, though breeding regularly to some extent in the pine woods of Scotland and Ireland. It is of the bulk and build of a Greenfinch, and, like these birds, roams about in bands in the winter. At such times it is a seed-eater, and frequents pines, larches, and spruce-firs, prising open the cones with its crooked bill, and clambering about the branches in the manner of a Paroquet, which to some extent it resembles in its appearance. The general red colour of head and body in the male places it beyond the possibility of confusion, for there is no other bird red above and below save the Pine Grosbeak, a rare bird, very unlikely to be seen.

BULLFINCH—6 inches; male red-breasted, but black-capped and with gray back.

CHAFFINCH—6 inches; red-breasted, but crown and nape slate-blue, and with a white patch on the wing.

HAWFINCH—7 inches; purplish below, ruddy-brown above, with white patch on the wing.

GREENFINCH—6 inches. Though the female Crossbill might by its yellowish-green colour suggest the male Greenfinch, the bold yellow patches on the wings and tail of the latter contrast with the almost uniformly brown wings and tail of Crossbills.

NOTE TO 'RUDDY-BREASTED BIRDS.'

BULLFINCH.—6 inches. Since the female Bullfinch has not the ruddy breast of the male, but both have a common feature in their heavy black caps, this bird appears under 'BLACK-HEADED BIRDS.' A tree and bush haunting bird of the garden, copse, and hedgerow, with small, stout bill, in shape somewhat like a Parrot's.

YELLOW-BREASTED BIRDS.

GRAY WAGTAIL.—Plate 51. Length, $7\frac{1}{2}$ inches, of which the tail alone is $3\frac{1}{4}$ inches. Head and neck blue-gray; above insertion of tail, and the under parts generally, bright yellow; throat black, with a white moustachial streak on each side; stripe over the eye also white; wings blackish-brown, with lighter edges; central tail-feathers black, but the outer ones white. Resident.

Eggs.—5–6, grayish-white, softly mottled all over with dull yellowish-brown, sometimes having a few black hair-lines at the larger end; $\cdot 75 \times \cdot 55$ inch (plate 126).

Nest.—Of dry grass, fine root-fibres, and moss, lined with hair, and placed in some recess in broken ground, in a cleft of a rock, or the interstices of stone walls, and similar spots, never far from water.

Distribution.—General, but somewhat rare in south-east England and the extreme north of Scotland.

There is an obvious connection between the facts that this bird is local in its distribution, nests principally by upland streams, breeds earlier than its congeners, and, although partially a migrant, remains in some numbers throughout the winter in certain parts of England. Those who would see it in its summer haunts must look for it on the banks of hill streams; but it may be observed as a passenger in

the lowlands generally in spring and autumn, and even then is *never far from water*. Here it may often be seen standing in a shallow, picking its insect-food from the surface of the water as it plays over the pebbly bottom. The long, smooth curves of head and body, the fine sweep of tail, and the vivid contrast of its colours make it at once the most elegant and brilliant of a singularly elegant and conspicuously marked group; while its motions at the water-side, on the grassy lawn, or on the open ways, the gliding run, the stately sweep now to one side, now to another, as it collects some trifle of food, and the *vertical rocking of its long tail* when for a moment the bird stands to rest, have no parallel for graceful dignity among the whole body of British birds. For the rest, it is a Wagtail of the Wagtails, with similar double-noted call, undulating flight, and small prattling song, inaudible unless the listener be close to the singer. It nests on the ground or on some ledge of rock, sheltered by overhanging herbage or projecting slab.

YELLOW WAGTAIL— $6\frac{1}{4}$ inches. Although yellow-breasted, lacks the black throat and the yellow upper tail-coverts; has upper parts olive instead of blue-gray; tail about an inch shorter.

PIED WAGTAIL, WHITE WAGTAIL.—Plumage black, white, and gray; no yellow.

YELLOW WAGTAIL.—Form, like the Gray Wagtail (plate 51). Length, $6\frac{1}{4}$ inches. Head and back olive; wings and central tail-feathers blackish, the outer tail-feathers white; stripe over the eye and the under parts bright yellow. Summer migrant.

Eggs.—4–6, resembling those of the Sedge-Warbler, grayish-white, softly mottled all over with ash and yellowish-brown, and often having a few black hair-lines at the larger end; $\cdot 78 \times \cdot 56$ inch (plate 126).

Nest.—Of dry grass, root-fibres, and moss, plentifully lined with hair and feathers, and placed on the ground among meadow-grass, corn, or coarse herbage.

Distribution.—General throughout England, but rare in the south-west; local in Wales; present in southern Scotland; in Ireland about the loughs of Ulster and Connaught.

The Yellow Wagtail is one of two yellow-breasted Wagtails found in the British Islands, but is at once distinguishable from the other—the Gray Wagtail—by its *olive upper parts*, the head and back of the Gray Wagtail being blue-gray. When it first arrives in spring, the Yellow Wagtail consorts with Pied Wagtails and Meadow-Pipits at the water-side, where it *runs* nimbly (not hopping), with eccentric tackings hither and thither as it snaps its insect-food from the ground. When it rises it utters a double-noted ‘*Wheet! wheet!*’ and, flying fairly high with undulating flight and oft-repeated cry, may settle on the hedge-top, a low branch of a tree, a taller stem in an open field, or more commonly upon the ground itself. It nests on the ground, often in some small hollow among corn or grass, and at this time is mostly to be found in cultivated lands. Later it frequents the meadows bordering streams, where it attends cattle for the sake of the insects they disturb while grazing. Its movements on the ground, where it is almost







GRAY WAGTAIL.



always to be seen, are distinguished by a walking or quickly running gait, a sudden tacking to right and left, an almost *incessant up-and-down wagging of its tail* while pausing, and quick springs into the air to take a passing insect on the wing. The tail is almost as long as the whole body of the bird, and the dark central feathers and white outer ones are very conspicuous during flight. With the exception of the Gray Wagtail, the Yellow Wagtail is the only yellow-breasted British breeding bird that walks.

GRAY WAGTAIL—7½ inches; head and back blue-gray; eye-stripe and moustachial stripe white; throat black; upper tail-coverts and under parts bright yellow; wings blackish-brown, with lighter edges; tail black, but outer feathers white.

PIED WAGTAIL, WHITE WAGTAIL.—These birds, closely resembling the Yellow Wagtail in form, gestures, and habits, are black, white, and gray in plumage, and lack the conspicuous yellow under parts.

GREENFINCH.—Plate 52. Length, 6 inches. Olive-green above on head, neck, and back; yellow towards the tail; a stripe over the eye and the under parts generally also yellow; wings dark, with a large patch of yellow overlying the sides of the body; tail also dark, with the basal portion of all but the central feathers yellow; bill conical, flesh-coloured. *Female*: altogether a browner bird, lacking the bright-yellow markings of the male bird, especially the yellow at the base of the tail. Resident.

Eggs.—4-6, bluish-white, blotched and speckled with orange-brown or dark brown, or both, and

purplish-gray, chiefly at the larger end, and often in the form of a zone; $\cdot 83 \times \cdot 55$ inch (plate 126).

Nest.—Of root-fibres, moss, and wool, lined with fine grass, hair, and feathers, and placed in hedges, bushes, or low trees.

Distribution.—General throughout the wooded and the cultivated parts of Great Britain and Ireland.

The Greenfinch in its build is a thick-set, full-billed bird, leaning rather to the coarser structure of the Hawfinch than to the slighter and more elegant make of the Linnet. Its chief distinction is its coloration; and the greenish-yellow of the upper and the bright yellow of the under parts, with the *conspicuous patches of bright yellow on the dark wings and tail*, make it easy to identify. It nests as a rule in the higher hedgerows or some compact bush or low tree, often in association with others of its kind, and, being a seed and insect eater, is to be seen searching both the ground and the trees for its food. Throughout spring and summer its various notes are continually in the ear. The most distinctive of these is a long-drawn 'scream,' uttered as the bird sits in a tree. Further, it has a short, twittering strain, and a similar but fuller song, resembling that of a Canary. It also utters a soft, caressing '*Pö-i!*' resembling, although coarser and longer drawn out, the '*Tui!*' of the Willow-Wren. In autumn the birds wander in scattered, high-flying flocks, twittering incessantly as they go. At this time they associate with the Sparrows in the stubble and the root-crops, and throughout the winter frequent farm-

houses in company with Chaffinches, Yellowhammers, and similar birds. There is no other British bird approximating to the green and yellow colouring of the Greenfinch except the Siskin, which is much smaller.

SISKIN— $4\frac{1}{2}$ inches. A tiny bird, Tit-like in its feeding antics in the trees; greenish above, with dusky streaks; yellow below, streaked with black on the flanks; tail dusky, yellow at base; crown and chin black in the male; known chiefly as a winter visitor.

SISKIN.—Form, like a little Greenfinch (plate 52). Length, $4\frac{1}{2}$ inches. Crown and chin black; general colour above greenish-yellow, with dusky streaks; clear yellow towards tail; wings dusky, with greenish-yellow wing-bar, and gray edges to the feathers; tail bright yellow, heavily tipped with black, except the two central feathers, which are wholly black; under parts yellow, streaked with black on the flanks. *Female*: duller, and lacks the black crown. Resident and winter migrant.

Eggs.—4–6, pale blue, speckled with reddish-brown, and with underlying gray markings; $\cdot 65 \times \cdot 47$ inch (plate 126).

Nest.—Of fir-twigs, rootlets, and moss, lined with hair and feathers, and placed high up against the stem of a birch or fir, or out on a branch; also in gorse and other bushes.

Distribution.—Principally in the pine districts of Scotland and Ireland; increasingly rare southwards, but more generally diffused in winter.

The Siskin nests regularly in the pine woods of Scotland and Ireland, and although thinly diffused as a breeding bird in other parts of the British Isles, it is chiefly known as a winter visitor. Banding together, the birds then come southwards, and often associating with Redpolls, Golderests, and birds of the Tit tribe, like them canvass the trees—commonly alders and birches—for their seeds, in doing which they exhibit to the full their qualifications for admittance into that acrobatic company. The Siskin's song is a minute variant of the twitter often used by a Canary, and common in one form or another to Greenfinches, Linnets, and the like. Its call is a loud, clear note, high-pitched and two-syllabled.

GREENFINCH—6 inches; the only other greenish-yellow perching bird, but more than twice as large as a Siskin.

TITMICE.—Although the Blue Tit, the Coal-Tit, and the Marsh-Tit are in size similar to the Siskin, and all indulge in similarly eccentric posturings whilst feeding in the trees, their markings are altogether different.

GOLDCREST— $3\frac{1}{2}$ inches; upper parts olive, yellower on lower back; wings dusky, with black patch and white wing-bars; crown slashed with bright yellow between black bars; under parts gray, with greenish or yellowish cast; also an eccentric posturer in the trees.

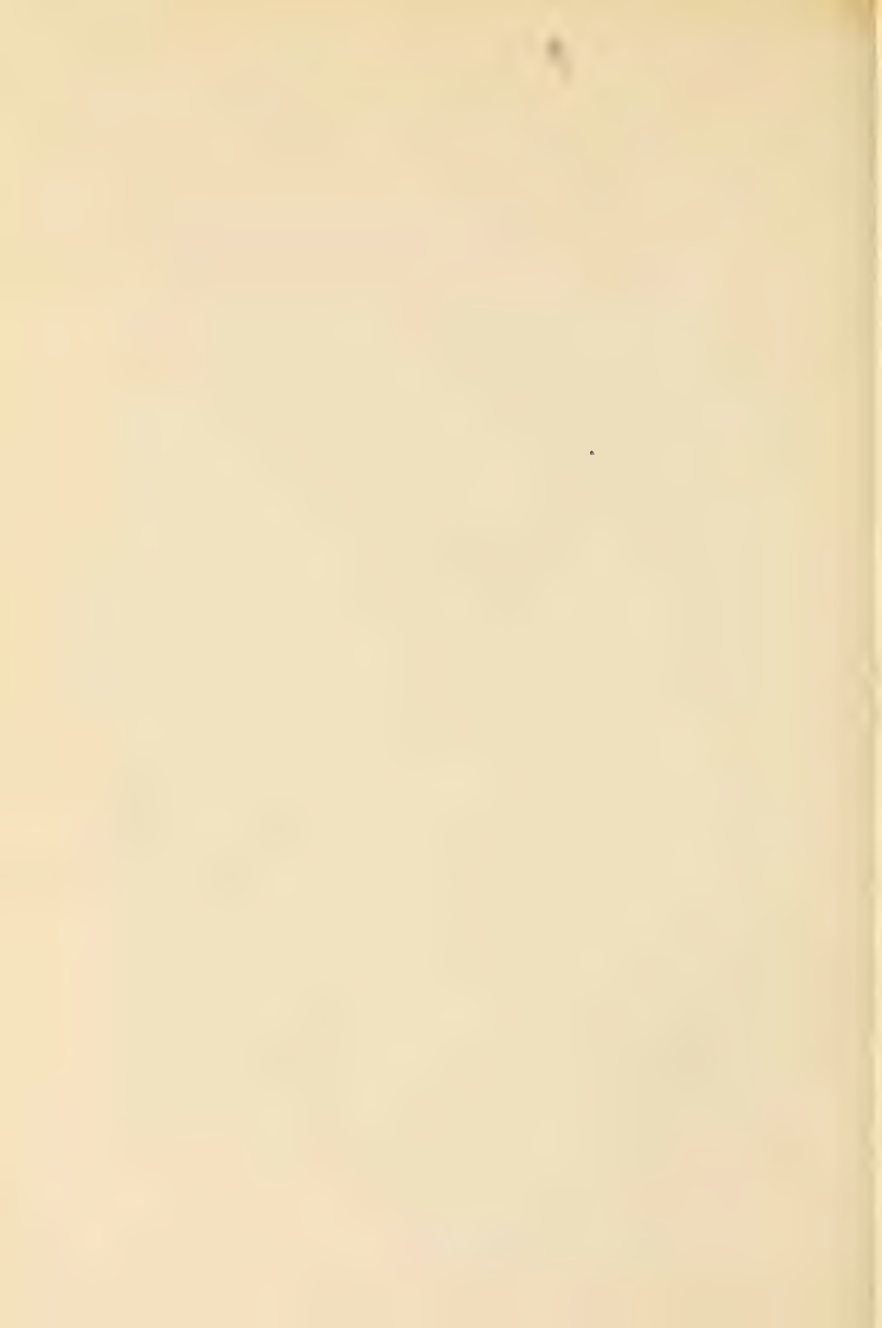
YELLOWHAMMER.—Plate 53. Length, $6\frac{1}{2}$ inches. Head yellow, with dusky streaks; upper parts chestnut, with dark centres to the feathers, but clear chestnut towards the tail; yellow underneath, with dark streaks; wings dusky-brown, edged narrowly



Plate 53.



YELLOWHAMMER.



with yellow; tail dark brown, showing white on the outer feathers during flight. Resident.

Eggs.—4-5, purplish-white, spotted and streaked as with pen-scrawlings of purplish-brown over fainter markings of violet-gray; $\cdot 85 \times \cdot 63$ inch (plate 126).

Nest.—Of dry grass, lined with finer grass and hair, and placed among sheltering grass in banks and ditch-sides, also in low bushes and hedges.

Distribution.—General.

This bird is not only yellow-breasted, but when it is seen perching, the yellow head, neck, and under parts leave upon the observer the impression of a bird generally yellow, with obscure overmarkings. When it flies, however, *the rich chestnut of the lower back and the white of the outer tail-feathers* come clearly into view. These three features make the Yellowhammer easy to identify. It has, moreover, a very distinctive song, '*Nyan-nyan-nyan-nyan-nyan-nyankee-e-e-e!*' all the syllables before the '*kee*' representing a series of uniform, quickly repeated notes, the '*kee*' note itself being a thin, long-drawn note, flattening in an indeterminate, melancholy way before expiring. This song the Yellowhammer utters time after time as it perches inertly on hedge or bush top, or in a tree. It nests in hedge or ditch banks, in the hedge itself or in some low bush, frequenting either cultivated land or gorse common. In summer it searches the lower trees for small life for its young, but being itself largely a seed-eater, is commonly to be seen feeding on the ground. It has a short note which

may be written '*Trit!*' and another, resembling the dripping of water upon water, which the birds often use as they pass overhead in jerky, scattered flight. In autumn Yellowhammers band together, frequenting favourite hedgerows or copses, or joining the Sparrows and Greenfinches in the stubble lands.

CIRL-BUNTING— $6\frac{1}{2}$ inches; the throat and a streak through the eye black; rump olive-brown. South of England bird.

CORN-BUNTING—7 inches. An inert percher on hedge-tops, tree-tops, and telegraph wires, emitting a song somewhat akin to that of the Yellowhammer by reason of its long-drawn, inflected, terminal note; but whereas the introductory notes in the song of the Yellowhammer are generally six or seven, the Corn-Bunting as a rule uses only three or four; and whereas the terminal note of the Yellowhammer is melancholy through its indeterminate flattening, the final note of the Corn-Bunting has in it a quality which has been not inaptly described as resembling the sound of breaking glass or the jingling of a chain. Although like a heavier Yellowhammer in its build, the Corn-Bunting lacks the bright yellow of its congener, the bright chestnut of the back, and the white outer tail-feathers.

GREENFINCH—6 inches. A bird emitting a scream-like note which, in the verbal description, might be confounded with the long-drawn notes of the Yellowhammer and Corn-Bunting; but the former is a *single* note, and therefore lacks the short introductory notes which precede the long, terminal note of the song of the Yellowhammer.

CIRL-BUNTING.—Form, like the Yellowhammer (plate 53). Length, $6\frac{1}{2}$ inches. Crown olive, streaked with black; upper parts chestnut-brown, with dark centres to the feathers, becoming grayish towards

the tail; band across the eye black, a bright-yellow band above it and below it; under parts yellow, forming a clear collar on upper breast, clouded with gray and chestnut on the breast, and streaked with chestnut on the flanks; wings and tail dusky, with white on the outer feathers of the latter. Resident.

Eggs.—4-5, dull purplish-gray, spotted and scrawled, usually more boldly than those of the Yellowhammer, with dark brown; .85 × .63 inch (plate 126).

Nest.—Of dry grass, root-fibres, and moss, lined with hair, and placed in a bank among the springing stems of a bush, or in a low bush a little above the ground.

Distribution.—South of England.

The Cirl-Bunting bears a general likeness to the Yellowhammer, but occurs only in the southern counties of England, and even there is locally distributed. Whilst the Yellowhammer affects hedgerows and bushes as perching-places, the Cirl-Bunting as a rule perches higher, frequenting the higher parts of trees that rise from the hedges or on the outskirts of woods. Its call-note and song are like those of the Yellowhammer, but the song is to be distinguished by the absence of the long final note used by the Yellowhammer. When seen perching, the Cirl-Bunting differs from the Yellowhammer in the *full-black markings about the face* of the former; when flying, the Cirl-Bunting exposes a *lower back* passing from brown to grayish-olive, whilst the Yellowhammer is coloured bright chestnut on the lower back. In

the autumn and winter months Cirl-Buntings band together in small flocks in the stubble lands.

YELLOWHAMMER— $6\frac{1}{2}$ inches; lower back rich chestnut, conspicuous during flight; lacks the black eye-band and black chin of the Cirl.

BLUE TITMOUSE.—Plate 54. Length, $4\frac{1}{2}$ inches. Crown blue; sides of head white, divided by a blue-black stripe across the eye, and enclosed by a heavier dark band looped from the nape to the dark chin; hind-head and nape blue, with indistinct gray patch on nape; back olive-green; wings and tail blue; under parts bright yellow, with a blue streak running down the centre of the breast. Resident.

Eggs.—7–8, or more, white, spotted minutely all over with reddish-brown, but principally at the larger end; $\cdot58 \times \cdot45$ inch (plate 126).

Nest.—Of moss, wool, feathers, and hair, placed in holes in walls and in holes in trees, and in many other cavities, natural or artificial, provided with a suitably small entrance.

Distribution.—General.

The Blue Tit, or Tom-Tit, is a very brightly coloured bird, much smaller than the Great Tit, and of a chubbier build than the Coal-Tit or Marsh-Tit. The *dark stripe passing through the eye and dividing the white face* into an upper and lower section at once catches the eye. No other Tit has anything resembling it, unless it be the Crested Titmouse, a rare and very local bird limited to certain tracts of pine woods

Plate 54.



BLUE TITMOUSE.



in northern Scotland. The Blue Tit is the commonest of the Tits, and nests in holes in walls and trees, high or low. He is very sociable, roaming in family-parties after the nesting season, and later in more composite bands including, besides his fellow Tits, such clambering adepts as Golderests, Siskins, Redpolls, Nuthatches, and Tree-Creepers. Like most of these, he searches the bark of trees for the insect-food that forms his principal fare; still, almost anything of an edible nature, from beef-suet to an opened cocoa-nut, will command his attention, and he will strip dead bark for the larvæ lurking between it and the wood. In his search he assumes any posture on or under a branch, but if he goes to the ground for food, springs back immediately with it into a tree. His notes are a chuckling '*Chur-r-r!*' a ringing, metallic '*Ping! ping!*' which, being extended, forms his song, '*Ping! ping! pi-i-i-ing!*' In autumn and winter the Blue Tit is an hourly passenger through suburban gardens.

GREAT TIT—6 inches; head black, not blue; lacks the dark line through the eye; has bold black breast-band.

COAL-TIT—4 $\frac{1}{4}$ inches; head, throat, and front of neck black; large white nape-patch; back olive-gray; under parts grayish-white.

MARSH-TIT—4 $\frac{1}{2}$ inches; head, nape, and chin black; back olive-brown; under parts grayish-white.

GREAT TITMOUSE.—Plate 55. Length, 6 inches. Head and throat black; cheeks and small nape-patch white; back olive-green; wings dusky-bluish on the shoulder, with a white wing-bar; tail-feathers dusky, the outer ones partly white; under parts bright yellow,

divided centrally by black band from chin to vent.
Resident.

Eggs.—6, or more, white, with light-red spots and blotches; $\cdot 7 \times \cdot 55$ inch (plate 126).

Nest.—Of moss, lined with hair and feathers, and placed in holes in walls, trees, rocks, or hollow structures such as iron gate-posts; also in the foundations of nests of Crows, Rooks, and Magpies.

Distribution.—General, but less common in north and west of Scotland.

The Great Tit is much the largest of the Tit tribe. Boldly marked with black, white, yellow, green, and blue, it is more like a bird of the tropics than one readily facing the winters of this northern clime. In summer it is to be sought in wooded situations, where it nests in holes in trees and in walls, and in similar situations; but it is more easily observed as a winter visitor to gardens, in the bark of the trees of which it seeks the larvæ which form its chief diet. Little, however, comes amiss to the omnivorous Great Tit, and a piece of cocoa-nut, suet, or a bone suspended by a string will ensure an early visit. Here, as on the trees, it will perch, swing, or clamber about with eccentric posturings; at times it holds its food down to a branch and ‘hammers’ it with powerful bill. This bird seldom goes to the ground. Restlessly roving, sometimes in association with other Tits and clambering birds, but more often keeping their own company, the Great Tits flit, often alone or in pairs, from tree to tree, calling to one another as they go. The bird has a varied repertory of notes; now it is

a '*Péetera! péetera! péetera!*' then a whistling '*Tui!*' in the style of a Willow-Wren, but stronger; at another time it becomes a metallic '*Git-a-lóng! git-a-lóng!*' or an incisive '*Ping! ping!*' or oftener still a chuckling '*Chur-r-r-r!*' Seen from below, the *heavy black band dividing the breast longitudinally, set off by the bright-yellow under parts,* stamps the Great Tit at once.

COAL-TIT— $4\frac{1}{4}$ inches; head, throat, and front of neck black; white patch on the nape much larger relatively to the size of the bird; back olive-gray; under parts grayish-white, but no black breast-band.

MARSH-TIT— $4\frac{1}{2}$ inches; head, nape, and chin black; no white nape-patch; back olive-brown; under parts grayish-white, but no black breast-band.

BLUE TIT— $4\frac{1}{2}$ inches; blue head and wings; sides of face white, divided by a dark stripe passing through the eye; under parts yellow, with central blue streak, but not comparable with the Great Tit's heavy black breast-band.

BLUE-BACKED BIRDS.

KINGFISHER.—Plate 56. Length, $7\frac{1}{2}$ inches. Bill very stout, much longer than the head and tapering to a point, orange at base, remainder black ; upper parts brilliant metallic blue, as also a band reaching from the shoulder to the base of the bill and enclosing a patch reddish about the eye and white on the sides of the neck ; throat white ; under parts ruddy-orange ; feet red. Resident.

Eggs.—6–8, sometimes more, rounded at both ends, pure glossy-white ; $\cdot 9 \times \cdot 75$ inch (plate 126).

Nest.—A bedding of fish-bones at the end of a hole bored in the bank of a stream or in a sand-bank, usually near water.

Distribution.—England and Wales generally ; Scotland and Ireland rarer and more local.

The chief distinguishing feature of the Kingfisher is its colour, a blaze of brilliant blue such as to call forth exclamation from the least interested observer as the bird flashes past in the sunlight. There is nothing like it among British birds with which it may be confounded ; and if the bird cants in flight, it offers a second criterion, a glimpse of the ruddy-orange under parts. The Kingfisher is to be looked for in the neighbourhood of water, the nest being placed in a tunnel excavated in the bank of a stream, or in some natural hollow in a similar situation. The bird has fixed perching-places, a dead bough or similar pro-



KINGFISHER.



NUTHATCH.



jection over the stream, whence it may dive for the fish below. When it is seen thus employed, the great spear-like bill declares the Kingfisher; but it is more probable that, disturbed by the intruder, the bird will be seen flying low along-stream—a glorified Dipper that vanishes at the first bend.

WOODPECKERS.—These are the only birds with great bills at all resembling that of the Kingfisher; but Woodpeckers are woodland and largely trunk-climbing birds, none of them having blue in its colouring.

NUTHATCH.—Plate 57. $5\frac{3}{4}$ inches. Upper parts and central tail-feathers blue-gray; remaining tail-feathers black, barred with white; line through the eye and extending along the neck black; cheeks and throat white; under parts buff, deepening into chestnut on the flanks; bill straight, long, strong, slate-blue; feet brown. Resident.

Eggs.—5–7, white, similar to those of the Great Tit, but more coarsely blotched with reddish-brown; $\cdot77 \times \cdot56$ inch (plate 126).

Nest.—A hole in the trunk or in a leading branch of a tree, bedded with dead leaves; the natural orifice, if too large, being partially stopped with clay.

Distribution.—South-eastern and central England; Brecon, Radnor, and some other parts of Wales; farther north extremely rare; unknown in Ireland.

The Nuthatch is a woodland bird, chiefly of the southern parts of England, being rare in the north, little known in Scotland, and unknown in Ireland. It is a rotund, thickly set, short-tailed bird, capable

of clambering about the branches of a tree with the agility and topsy-turvy tricks of the Tit tribe, of running with mouse-like motion on the trunk like a Tree-Creeper, or of hammering off the dead bark with its strong bill like a Woodpecker. It is just as capable of making sallies for insects from a set perch like a Flycatcher; and when later in the year it turns its attention to nuts, acorns, and fruit-stones, it has the habit of wedging them in some crack in the bark whilst it breaks the hard shells with its bill. A bird of such unusual and broadly distributed colours, and of such habits, needs but to be seen to be recognised. If not seen, it generally manages to make itself heard during the nesting season, from March onwards, by repeating a loud, far-carrying note, '*Tui-tui-tui!*' For nesting purposes this bird uses a hole in a tree or in a wall, partially plastering up the aperture if it be too large. In winter the Nuthatch frequents orchards and gardens. The three Woodpeckers, the Wryneck, and the little Tree-Creeper differ in their coloration so entirely from the Nuthatch that it suffices merely to mention that they, like the Nuthatch, are trunk-climbers.

NOTES TO 'BLUE-BACKED BIRDS.'

GRAY WAGTAIL.—Blue-gray on upper parts, but because even more brilliantly yellow below, described under 'YELLOW-BREASTED BIRDS.' A tail-wagging bird of the water-side, the tail as long as the body.

REDSTART AND WHEATEAR.—The males blue-gray on the upper parts in summer only; *vide* 'RUDDY-BREASTED BIRDS.' Both are 5½–6 inch birds, the former showing brilliant chestnut rump and tail as it flies, and the latter conspicuously white rump and tail feathers when on the wing.

SWALLOW AND SWALLOW-LIKE BIRDS.

SAND-MARTIN.—Form, like the House-Martin (plate 58). Length, 5 inches. Upper parts mouse-brown; under parts white, except the cheeks and a broad breast-band, which are mouse-brown; tail bluntly forked. Summer migrant.

Eggs.—4-6, elongated, pure-white; $\cdot 7 \times \cdot 48$ inch (plate 126).

Nest.—Of dried grass and feathers, placed at the end of a gallery bored in the face of a sand or earth bank beside rivers or the sea, in sand-pits, natural bluffs, or artificial cuttings.

Distribution.—General, though rather local owing to its nesting habits.

A builder in holes drilled in sand-banks, the Sand-Martin, the smallest of our hirundines, is to be sought by river-banks, sand-cliffs, on the seashore, or wherever an artificial cutting offers a soft clay or sandy face in which he may hollow out his tunnel. He affects the neighbourhood of water, and is commonly to be seen racing up and down over water-courses near his nest. As he goes he utters from time to time a low, guttural sound. The birds are very sociable, nest usually in colonies, gather nightly in great companies in early spring and late summer to sleep in reed or osier beds, and 'swarm' in the autumn (mid September) in the manner common with the Swallow kind when

about to migrate. It arrives in England usually in the latter half of March, and departs as a rule not later than October.

SWALLOW— $7\frac{1}{2}$ inches; black above; breast-band *black*; tail deeply forked. Cries '*Wheet! wheet!*'

HOUSE-MARTIN— $5\frac{1}{2}$ inches; black above, save lower back, which is white; no breast-band. Call, '*Pri!*'

SWIFT—7 inches; appears wholly black; wings long and slender. Call, a shrill scream.

HOUSE-MARTIN.—Plate 58. Length, $5\frac{1}{2}$ inches. Head, nape, and upper back blue-black; wings and tail dull black; lower back and under parts white. Summer migrant.

Eggs.—4–5, elongated, pure white; $\cdot 79 \times \cdot 52$ inch (plate 126).

Nest.—A mud shell with opening at the top, lined with straw and feathers, and placed under bridges and the eaves of houses and barns, or beneath some rocky projection on cliffs.

Distribution.—General.

The House-Martin is the bird that affixes the mud shell of its nest beneath the eaves of country houses and barns, sometimes alone, sometimes in lines of fifty or sixty nests. It may be found nesting also on the face of rock-cliffs, its original habitat. Like the Swallow, the Martin is nearly always on the wing, roving up, down, and about, capturing its food while flying, and emitting from time to time a high-pitched '*Pri!*' quite unlike the notes of other birds of the Swallow kind. When on the wing, it may be distin-

Plate 58.



HOUSE-MARTIN.





SWALLOW.

R



guished easily from any of its family by the *conspicuous white tract on the lower back* ; and when perching, it may be as readily detected by the *absence of any breast-band*, the under parts being uniformly white. In the late summer the birds congregate with Swallows and Sand-Martins, often in the neighbourhood of streams and open waters, and, sleeping at night in large companies in reed-beds, remain together until in September they ‘swarm’ for migration. Arriving in England towards the end of March, the House-Martin, save for stragglers, usually retires by the middle of October.

SWALLOW— $7\frac{1}{2}$ inches ; lacks the white lower back of the House-Martin ; has coloured throat and black breast-band ; tail more deeply forked. Call, ‘*Wheet ! wheet !*’

SAND-MARTIN—5 inches ; above wholly brown ; below white, except brown breast-band. Call, a guttural sound.

SWIFT—7 inches ; dead black all over, except gray chin, scarcely visible ; wings long and slender. Call, shrill scream.

SWALLOW.—Plate 59. Length, $7\frac{1}{2}$ inches. Fore-head and throat reddish-brown, not readily visible during flight ; head, neck, breast-band, and back glossy blue-black ; wings and tail dull black — latter, when spread, showing a fancy white pattern ; outer tail-feathers extended as a long slender fork in male, less extended in female ; under parts white. Summer migrant.

Eggs. — 4 – 6, elongated, white, blotched and speckled, some minutely and closely, others more

coarsely and sparsely, with dark gray, yellowish-brown, and dark brown; $\cdot 82 \times \cdot 54$ inch (plate 126).

Nest.—Saucer-shaped, of mud and straw, lined with fine grass and feathers, and placed on ledges, in chimneys, but most frequently on the beams in barns, &c.

Distribution.—General.

Birds of the Swallow kind are so well known by all that the chief difficulty is to discriminate the different forms. All are ceaseless fliers, coursing through the air, or up, down, and about the land and water, from dawn till dusk. All are gregarious, and not only among themselves, for it is a not uncommon thing for Swallow, House-Martin, and Sand-Martin to consort on the wing, and the Swift does not refuse to be of the company. Swallows, when flying, call with a brisk '*Wheet! wheet!*' The *long fork of the tail* of the male, and even the less extended one in that of the female, suffice to distinguish them from the blunter forks of the House-Martin, Sand-Martin, and Swift. Swallows make open nests, generally on the beams or ledges in barns and outhouses. They roost, often in great congregations, in osier-beds. When about to migrate, they swarm restlessly upon bare trees, church steeples, telegraph wires, and similar places. The song is a prattling warble, uttered as the bird perches on a tree, on the cornice or roof-ridge of a house, and such situations.

HOUSE-MARTIN— $5\frac{1}{2}$ inches; under parts wholly white, therefore lacking ruddy throat-patch and black breast-band of Swallow; lower back white, conspicuous during flight; tail bluntly forked. Note, '*Pri!*'

SAND-MARTIN—5 inches; upper parts mouse-brown; under parts white, with mouse-brown breast-band; tail bluntly forked. Note, a guttural sound.

SWIFT—7 inches; sooty-black, with gray chin, but during flight appears wholly black; wings very long and slender, like a pickaxe; tail very bluntly forked. Note, shrill scream.

SWIFT.—Plate 60. Length, 7 inches. Sooty-black, with greenish gloss, except the chin, which, although gray, is quite inconspicuous during flight; tail very bluntly forked. Summer migrant.

Eggs.—2, unglossed, chalk-white; $1.0 \times .65$ inch, and therefore much elongated (plate 126).

Nest.—Scantily formed of straw, grass, and feathers, and placed in holes in rocks, steeples, towers, and beneath the eaves of houses.

Distribution.—General, though less common in some parts of the west of Scotland and of Ireland.

To state that this bird nests in holes in house-eaves, in the walls of ruins, church towers, crevices in cliffs, and such places, affords small indication of where he is likely to be found. Although well diffused, Swifts are fewer than Swallows, or than either of the Martins, and the bird that one moment dashes screaming down the village street, the next is away up in the blue sky. The Swift lives on the wing, and is all but unfitted for perching or walking. The *wings, long, slender, curved, and set well forward on the shoulders*, give the bird when flying the appearance of a pickaxe. The Swift, like the birds of the Swallow tribe, is a frequenter of water for the sake

of the insect-food to be caught flying above it; but unless the weather be inclement, he is by preference a bird of the upper regions of the air, where he is no doubt seriously enough employed, albeit his wild, erratic flight leaves upon the observer the impression that his days are spent in airy sport. Although often to be seen in small parties on the wing, or in larger ones drawn together by a congestion of insects in some particular spot, Swifts do not swarm to roost or for migration as is usual with birds of the Swallow kind. They withdraw quietly during August.

SWALLOW— $7\frac{1}{2}$ inches; white below, except chin and breast; tail deeply forked. Note, '*Wheet! wheet!*'

HOUSE-MARTIN— $5\frac{1}{2}$ inches; white below and on the lower back. Note, '*Pri!*'

SAND-MARTIN—5 inches; mouse-brown above; white below, except cheeks and breast-band, which are mouse-brown. Note, a guttural sound.







W R E N S.

COMMON WREN.—Plate 61. Length, $3\frac{1}{2}$ inches. Upper parts brown, becoming ruddier towards the tail, and barred across with dark brown; stripe over the eye, face, throat, and breast whitish; sides of body ruddy, barred with dark brown; bill sharp-pointed, brown; legs lighter brown. Resident.

Eggs.—6–8, white, with reddish spots at the larger end; $\cdot 67 \times \cdot 5$ inch (plate 126).

Nest.—Globular, with entrance at the side, made of dead leaves, or moss, or grass, some lined with feathers, some without lining, and placed against ivy-clad walls and trees, among roots exposed by landslips in banks, in bushes, thatch, hay-stacks, and many other secret nooks and niches.

Distribution.—General.

The Common Wren and the Golden-Crested Wren are the *smallest* British breeding birds, and although their common name of Wren denotes no near relationship, they are here classed together solely because of their size. The Common Wren is a rotund little fellow, generally to be found creeping among the intricacies of tangles of dead wood or a hedge-bottom. Although secretive, he seems to be under some compulsion to cross from hedge to hedge just before one comes abreast of him, and as he does so the tiny ruddy-brown creature, with his

quickly whirring wings, appears little larger than a large moth flying low to the ground, and then darting into the hedge opposite. When he thinks himself unobserved he will come to the top of the hedge, and as he fires off his rattling song, *cocks up his small stump of a tail at right angles to his back*, a feat peculiar to this bird. The Common Wren is generally distributed, and builds a globular nest, with a circular entrance at the side, and this nest it packs in all sorts of out-of-the-way corners: among denuded tree-roots by the road or brook side, in holes in walls, or in the close fork of branches, in the hedge-packing, or in ivy growing about trees; in short, anywhere where the tangle is dense enough or a hollow retired enough to receive its ball of a nest. The Common Wren's song is wonderfully powerful for so small a bird, and opens with a few repeated, clearly whistled notes, followed by a more rapid warble of the same quality of tone, into which, just before concluding, he invariably inserts a series of rattling, mechanical notes. The song, which is a long one, is repeated without variation. Winter brings the Wren into our gardens, but as it is entirely an insect-eater, it comes only to canvass the bark, old wood, cracks and crevices in the palings, and the like, for insects and their larvæ. Its note is frequently to be heard at this time—a sustained *Tet-tet*-ing, resembling the clicking of cogs when a clock is being wound; and, indeed, it is the same mechanical rattle that the bird inserts before ending its song. The song is also to be heard during winter when the weather is open. There is no other bird with the small, brown, rounded body and the short, cocked tail of the Common Wren.

GOLDEN-CRESTED WREN.—Plate 62. Length, $3\frac{1}{2}$ inches. Upper parts olive-green, with a yellow tinge; wings dusky, with inconspicuous white cross-bars and a plain black patch; under parts yellowish-gray; bright-orange stripe along the crown, enclosed between parallel black bars. Resident.

Eggs.—5–8, at times more, fleshy or buffish-white, with minute spots of reddish-brown, chiefly at the larger end; $\cdot 52 \times \cdot 4$ (plate 126).

Nest.—Very deep and compact, made of moss, lichens, and spiders' webs, lined with feathers, and suspended beneath, but rarely placed upon, a branch, often of a fir, or against ivy-covered trees.

Distribution.—General.

The Goldcrest shares with the Common Wren the distinction of being one of the two *smallest* British breeding birds, although these two birds, in spite of their possessing in common the popular name of Wren, are not nearly related. In appearance also the Goldcrest differs much from the little, brown Common Wren. Yellowish-olive above and yellowish-gray below, with gold-slashed crown, and wings barred with white and patched with black, it is as bright as it is small. Occurring almost universally throughout the British Isles, it is specially to be found where yews and firs grow, under a branch of one of which it usually 'slings' its nest. The bird is easier to observe in winter, being resident, and joined at that time by a large immigration from the Continent. It may be seen threading the hedgerows and shrubberies

with the creeping motions of the Common Wren, or clambering about the branches of higher trees with the eccentric posturings of the Titmice, emitting at times a small, anxious 'chinking' note as it goes. The call is a shrill '*Zee! zee!*' frequently uttered, now by one, now by another, of the little band of winter foragers as they flit from tree to tree in never-ending search for their insect-food. They are at such times frequent companions of the Long-Tailed Tits, who have a similar call-note—'*Zee!*' The Gold-crest does not cock its tail like the Common Wren, but has the habit of puffing out its plumage and drooping its wings at its sides. Its size, colours, and the distribution of the colours are such as to give the bird a peculiarly moth-like appearance, especially when seen fluttering to support itself as it seeks to cling to the trunk of a tree while examining the bark.

DARTFORD WARBLER, or FURZE-WREN.—

Plate 63. Length, 5 inches, of which $2\frac{1}{2}$ inches are tail. Upper parts blackish-brown; chin, throat, and breast chestnut; belly white; tail graduated, with white edges to the outside feathers; bill dark and sharp; feet pale brown. Resident.

Eggs.—4-5, greenish-white, closely spotted with brown over paler brown and gray: $\cdot68 \times \cdot5$ inch (plate 126).

Nest.—Of dead grass-stems and soft furze-shoots and wool, lined with finer grass-stems, and placed



GOLDEN-CRESTED WREN,



DARTFORD WARBLER.

on the inner parts of the branches of thick furze-bushes.

Distribution.—Southernmost counties of England, and some of the south-eastern and midland counties.

The Furze-Wren is a tiny, short-winged, long-tailed bird, nesting, as its name denotes, in furze-bushes; and, for a bird of the open, it is of singularly skulking habits. It also frequents reed-beds. It creeps about bushes like the Common Wren in search of its insect-food, sometimes appearing suddenly above cover, as if thrown up into the air from below, but after short, jerky fluttering it drops again into hiding. When perching it clings to the top of a reed or the tip of a furze-shoot, and is never still for a moment. As it flits from the top of one bush to that of another the short wings beat rapidly, and the flight is dipping, the tail being fanned as the bird alights. If not seen, the Furze-Wren may betray its presence by a beautifully clear '*Pit-tiu!*' or a repeated, low, scolding '*Cha!*' Spring and autumn are the times when this bird is most in evidence; at the former it must up to the topmost spray of a furze-bush to fire off with excited antics its jerky little song; in the autumn it may be seen among the root-crops or inshore by the sea. In its impetuous and inconsequent ways, as also in the character of its song, the Furze-Wren recalls the Whitethroat. Though so inconspicuous in its garb, this is fortunately so *dark*, the bird itself is so small, and the tail, which is habitually fanned, is so long that identification of the Dartford Warbler in its furzy haunts is not difficult

if only the bird can be seen. Its notes, too, are quite distinctive.

GRASSHOPPER WARBLER— $5\frac{1}{2}$ inches. Also an habitual skulker in low growth, particularly in marsh lands, but olive-brown above and white below, of stouter build, and with shorter tail. Note, a stridulous reeling. A summer migrant, and much more widely diffused than the Furze-Wren.

COMMON WHITETHROAT— $5\frac{1}{2}$ inches. Though resembling the Furze-Wren in its creeping ways, its jerky fluttering over bush or hedge, and its excited song delivered from a top twig, has ashy head, ruddy-brown back, and is white below, particularly on the throat, with a pink flush on the breast.

TRUNK-CLIMBING BIRDS.

GREEN WOODPECKER.—Plate 64. 12 inches. Upper parts green; rump yellow; crown crimson; face black, with crimson moustaches, edged with black; massive dark bill; under parts whitish, tinged with yellow or green. Resident.

Eggs.—5-7, tapering slightly at one end, glossy-white; $1.3 \times .88$ inch (plate 127).

Nest.—A hole bored in a tree-trunk or in a leading branch, and shaped like a retort, the eggs being deposited in the chip-lined, bulb-shaped chamber within.

Distribution.—Wooded parts of England, but rare north of Lancashire and Yorkshire; west Cornwall; Wales; not Scotland or Ireland.

There is no mistaking this great green bird if only it can be seen; the difficulty is to catch sight of it. Nesting in a hole excavated in the trunk of a tree—generally a decaying one—the bird is to be sought in well-timbered country. If seen in a tree, it will probably be as it peeps round from the farther side of a trunk or some leading branch to which it is clinging. When searching the bark for insect-life secreted in the cracks and crevices, it runs with ease upon the vertical surface, and usually, upon reaching the portion where the branches begin, drops with a dipping flight to the base of a neighbouring tree. It may be well seen, too, as it flies along some glade or grove, or from one tree to another in open park-land. The best view, however, is when

the observer comes upon the bird employed in picking its favourite food—ants—from an ant-hill or some well-frequented run. But the Green Woodpecker will probably be heard fifty times ere it be seen once. Its cry is just a huge, merry yell—a shout, not a song—ringing out with startling suddenness in the quiet woodland. It is quite unlike any other bird-cry; and whilst one of our oldest poets has called it a ‘loud laugh,’ a modern writer states that the bird ‘yikes.’ If this word is the equivalent of the German *jauchzen*, it is exactly the right one. The Green Woodpecker ‘shouts for joy.’

GREAT SPOTTED WOODPECKER—10 inches; conspicuously pied with black and white, and having crimson crown.

LESSER SPOTTED WOODPECKER—6 inches; conspicuously pied with black and white, and having crimson crown.

SPOTTED WOODPECKER (GREAT SPOTTED WOODPECKER).—Plate 65. 10 inches. Black above, but with a crimson patch on the nape, a white spot at each side of the neck, and a white patch on each wing, besides rows of fine white spots forming transverse bars on the wing-feathers, and a little white on the outer tail-feathers; black moustachial streak; face and under parts white, but crimson below root of tail; bill large, stout, and straight. Female lacks the crimson patch on the nape. Resident.

Eggs.—6–7, white, more rounded than those of the Green Woodpecker; $\cdot 98 \times \cdot 75$ inch (plate 127).

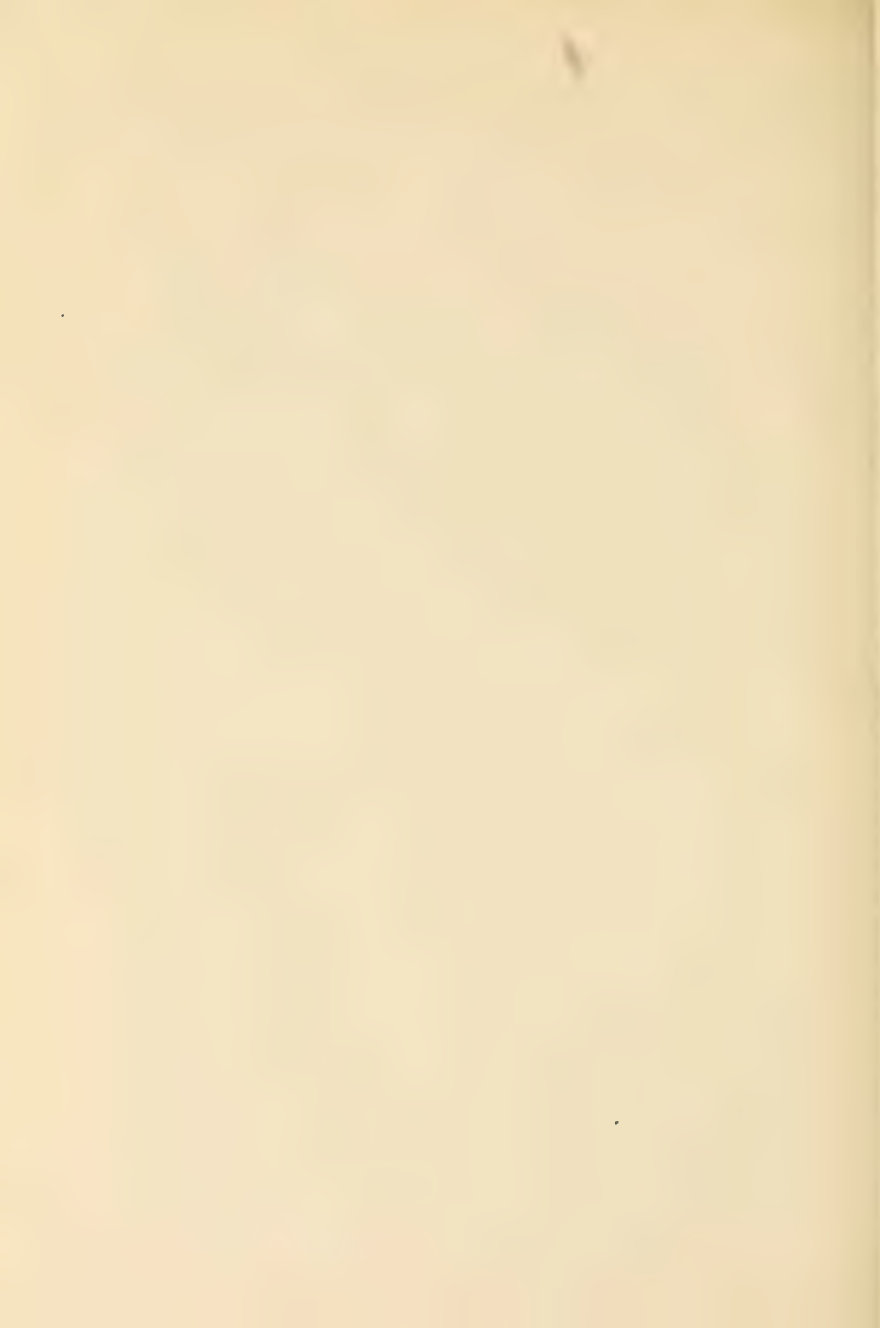
Nest.—A hole in a tree-trunk, the eggs being placed upon a bedding of chips in the inner cavity.



GREEN WOODPECKER.



GREAT SPOTTED WOODPECKER.



Distribution.—Fairly general in the wooded parts of England, chiefly south and Midlands, rare north of Durham ; Brecon, but scarce in other parts of Wales ; south-eastern Scotland, but rare ; east coast of Scotland on migration ; not in Ireland.

The Spotted Woodpecker, resident in the more southerly counties of England and reinforced by numerous migrant birds in autumn, is, like all our Woodpeckers, a bird of the woodland. Here, running up the trunk or along the leading branches of trees, he hammers the bark to discover lurking insect-life. He has all the peeping habits of his kind, but ranges as a rule higher in the trees, so that he is less often seen. When seen, however, the large, highly variegated, black-and-white bird clinging to trunk or branch is easily identified. It is probable that he will be heard ere seen, and his presence is indicated by a repeated '*Cheek ! cheek !*' or by a series of taps with the bill upon the bark of a tree, performed so quickly as to cause them to run up into a continuous rattling sound. He is seldom, if ever, seen on the ground, but the fruit and berry season draws him into garden and orchard, besides offering him a change of diet in the shape of acorns and nuts. The bird drills a round hole in the trunk or in a leading branch of a decaying tree ; the eggs are placed upon the floor of a chamber hollowed out within, either unlined, or lined with a portion of the chips.

BARRED WOODPECKER—6 inches. Besides being less than half the size of the Spotted Woodpecker, this bird is marked on nape, back, and wings with a system of fine white bars on a black ground. Also drums with the bill on tree-trunks, but with less force.

BARRED WOODPECKER (LESSER SPOTTED WOODPECKER).—Form, like Spotted Woodpecker (plate 65). Length, 6 inches. General colour above black, but patched, spotted, and barred with white all over, except nape, rump, and central tail-feathers, which are plain black; forehead whitish; crown crimson; face white, with black moustache; sides of neck and under parts white, with black bars on the sides of the body, and black spots below insertion of tail; bill long, stout, straight. Female lacks the crimson crown. Resident.

Eggs.—6–7, white; $\cdot 75 \times \cdot 57$ inch (plate 127).

Nest.—A hole bored in the trunk or in a leading branch of a tree, the eggs being deposited upon a bed of chips in the cavity within.

Distribution.—Chiefly in the south of England and the Midlands; rare farther north and in Wales; practically unknown in Scotland and Ireland.

Like the Spotted Woodpecker, this bird (which is barred rather than spotted) is an inhabitant principally of the southern counties of England, but occurs as far north as Yorkshire. In other parts he is almost unknown. A creeper on trunks and along—generally the under sides of—branches, the bark of which he detaches by hammering it with his bill in order to extract hidden insect-life, he has all the ways of the orthodox Woodpecker. None of these perch cross-wise upon branches, though they may at times be seen standing along the upper sides of them. The Barred Woodpecker is a bird of wood and park land, though in the season he will wander into gardens

and orchards, or wherever fruit and berries are to be had. The note is a sharp, single sound not unlike the '*Pick!*' of a Blackbird; and, like the Spotted Woodpecker, the Barred Woodpecker beats a tattoo with his bill on the bark of trees, this being done so rapidly as to form a continuous rattling sound audible at a considerable distance. This sound is to be heard frequently in spring, when the bird nests, as usual with Woodpeckers, in a hole bored by him in the trunk or one of the leading branches of a decaying tree. The Barred Woodpecker seldom, if ever, goes to the ground.

SPOTTED WOODPECKER—10 inches; is also of a complicated black-and-white pattern, but is nearly three times as large.

WRYNECK—7½ inches; occasionally a trunk-climber, but ruddy-gray in general appearance. The note is very like that of the Barred Woodpecker.

NUTHATCH—5¾ inches; trunk-climber, percher, and hanger, but plain blue-gray above, and buff and chestnut below.

TREE-CREEPER—4¾ inches; a small trunk-climber, brownish above, silky-white below; bill slender and curved.

TREE-CREEPER.—Plate 66. 4¾ inches. Upper parts brown, minutely variegated with black, white, and buff; streak above the eye and under parts silky-white; bill long, slender, and curved downwards. Resident.

Eggs.—6–9, white, spotted with reddish-brown, chiefly at the larger end; .62 × .47 inch (plate 126).

Nest.—Of rootlets, grass, and moss, lined with wool, feathers, and shreds of inner bark, and placed in a gap where bark has sprung from the bole of a tree, any superfluous depth being levelled up with twigs; also in recesses among the thicker stems of ivy growing against tree-trunks, and other similar places.

Distribution.—General.

The Tree-Creeper is to be identified by its peculiar and unvarying habits. It is a tree-creeper indeed, creeping up the trunks and along the stouter branches of trees in search of small insect-life lurking in the crevices of the bark. It moves with a spasmodic running gait, with trailed tail and a gliding motion resembling that of a mouse. Its path is ever upward, and having worked its way up the bole of one tree, it drops to the base of a neighbouring one, there to resume its spiral, upward path. The Tree-Creeper shares with the Woodpeckers, Nuthatch, and Wryneck the distinction of creeping about tree-trunks in this manner, but is a tiny bird in comparison with any of these. *Its delicate, curved bill further distinguishes it.* Few can claim to have heard the Tree-Creeper's song, the only sound to which it usually gives utterance being a spiritless 'Wheesht' as it passes from one tree to another. The bird is resident throughout the British Islands, and is generally a denizen of wooded districts, where it places its nest in crevices in ivy-covered trunks, between a piece of hanging bark and the trunk of a tree, and in similar places. In winter a Tree-Creeper often joins the roving bands of Titmice, Goldcrests, &c. that

Plate 66.



TREE-CREEPER.





WHITE-TAILED EAGLE.



pass through our gardens, canvassing the bark of trees for larvæ and small insect-life.

WRYNECK.— $7\frac{1}{2}$ inches. Occasionally seen climbing tree-trunks in pursuit of insects, but although also of a highly variegated plumage, it is a considerably larger bird, with a plain, pointed bill, and is much given to writhing its neck about in a manner that is unique.

NOTES TO 'TRUNK-CLIMBING BIRDS.'

NUTHATCH.—The Nuthatch, being not exclusively a trunk-climber, and having a distinctive blue back, has been described under 'BLUE-BACKED BIRDS.' A woodland bird, percher and trunk-climber, blue-gray above, buff and chestnut below.

WRYNECK.— $7\frac{1}{2}$ inches. The Wryneck, being only occasionally a trunk-climber, has been described under 'BROWN BIRDS WITH SPOTTED BREASTS.' A brownish-gray bird, whitish below, finely speckled and mottled all over.

EAGLES AND EAGLE-LIKE BIRDS.

GOLDEN EAGLE.—Form, like White-Tailed Eagle (plate 67). 3 feet. General colour deep brown, except head and hind-neck, which are tawny; ash-gray tail, with dark cross-bars and terminal band; flight-feathers black; bill hooked and dark; legs feathered close up to the feet; feet yellow. *Young birds* have the half of the tail nearer the body white, the remainder being brown. Resident.

Eggs.—Usually 2, sometimes 3, dirty-white, patched with rusty-brown; 2.9×2.3 inches (plate 127).

Nest.—A large platform of sticks, with a lining of softer material, placed usually on some lofty rock, but occasionally in a tree.

A bird of 3 feet in length, with $4\frac{1}{2}$ feet span of wing from tip to tip, with broad, rounded tail, and of commensurate bulk, the Golden Eagle is unlikely to be confounded with any other bird unless it be itself an Eagle. The Golden Eagle, however, is distinguished from others by its light-tawny nape and hind-neck. Owing to its depredations among sheep, this bird has been killed off throughout the greater part of the British Isles, until now it breeds only by sufferance in the Scottish Highlands and the islands off the west coast of Scotland. It nests on the crags or in a tree, and preys upon hares, rabbits, grouse, &c., besides being a devourer of carrion. It is a lethargic

bird whether on the perch or wing, but when seen circling up in lofty flight, renewing the impulse from time to time by a few strokes of its wings, the absence of effort bespeaks the presence of confident power, as becomes this monarch of the air.

WHITE-TAILED EAGLE—3 feet; tail pure white; legs unfeathered.

WHITE-TAILED EAGLE.—Plate 67. 3 feet. General colour of upper parts brown, inclining to gray on the head and neck, and some of the wing-feathers having lighter edges; flight-feathers black; tail white; under parts brown, lighter on the throat and chest; bill and feet yellow, the legs not feathered. *Young birds:* head blackish-brown; upper and under parts highly mottled, light brown on lower back; tail brown; bill dark; feet yellow. Principally winter migrant.

Eggs.—2, dirty-white; 2.85×2.2 inches (plate 127).

Nest.—A mass of sticks, with softer material for lining, placed on sea-cliffs, but sometimes on an inland rock or water-surrounded island.

Distribution.—Only in some of the islands north and west of Scotland, and at rare points on the west coast of Ireland.

All but extirpated from the British Isles as a breeding species, the White-Tailed Eagle—generally young birds migrating—appears yearly in the coast counties during the autumn and winter months. It nests for the most part on sea-cliffs, preying largely upon cliff-breeding species, but varying its diet by

searching the sea from a considerable height and swooping down to clutch any fish coming near the surface. It nests also in trees, upon rocky islands in inland lakes, and at times upon the ground. By land it preys upon hares, rabbits, grouse, &c., besides following its fishing habits upon inland waters. It feeds upon carrion also. The cry is a shrill scream. Being a bird of dimensions comparable only with those of the Golden Eagle, it may when in adult plumage be at once distinguished from the latter by its pure-white tail, besides having the legs unfeathered. Young birds of the White-Tailed Eagle have the tail of a whitish-brown, whilst those of the Golden Eagle have the half nearer the body white, the rest forming a broad terminal band.

COMMON BUZZARD.—Plate 68. 20 to 23 inches. Upper plumage brown generally, with transverse bars on the broad tail; neck and upper breast also brown, becoming white on lower breast, with detached brown blotches; flanks and thigh-feathers brown; under sides of tail-feathers whitish, with twelve dull cross-bars; under sides of wings brown, with large white patch; bill dark and hooked; irises, cere, and legs yellow. Resident.

Eggs.—3-4, dirty-white, clouded, blotched and spotted with rust-colour; 2.25×1.75 inches (plate 127).

Nest.—A pile of sticks, lined with dry grass, wool, and fresh leaves, placed on inland scrub-covered cliffs or in a tree in wooded country.

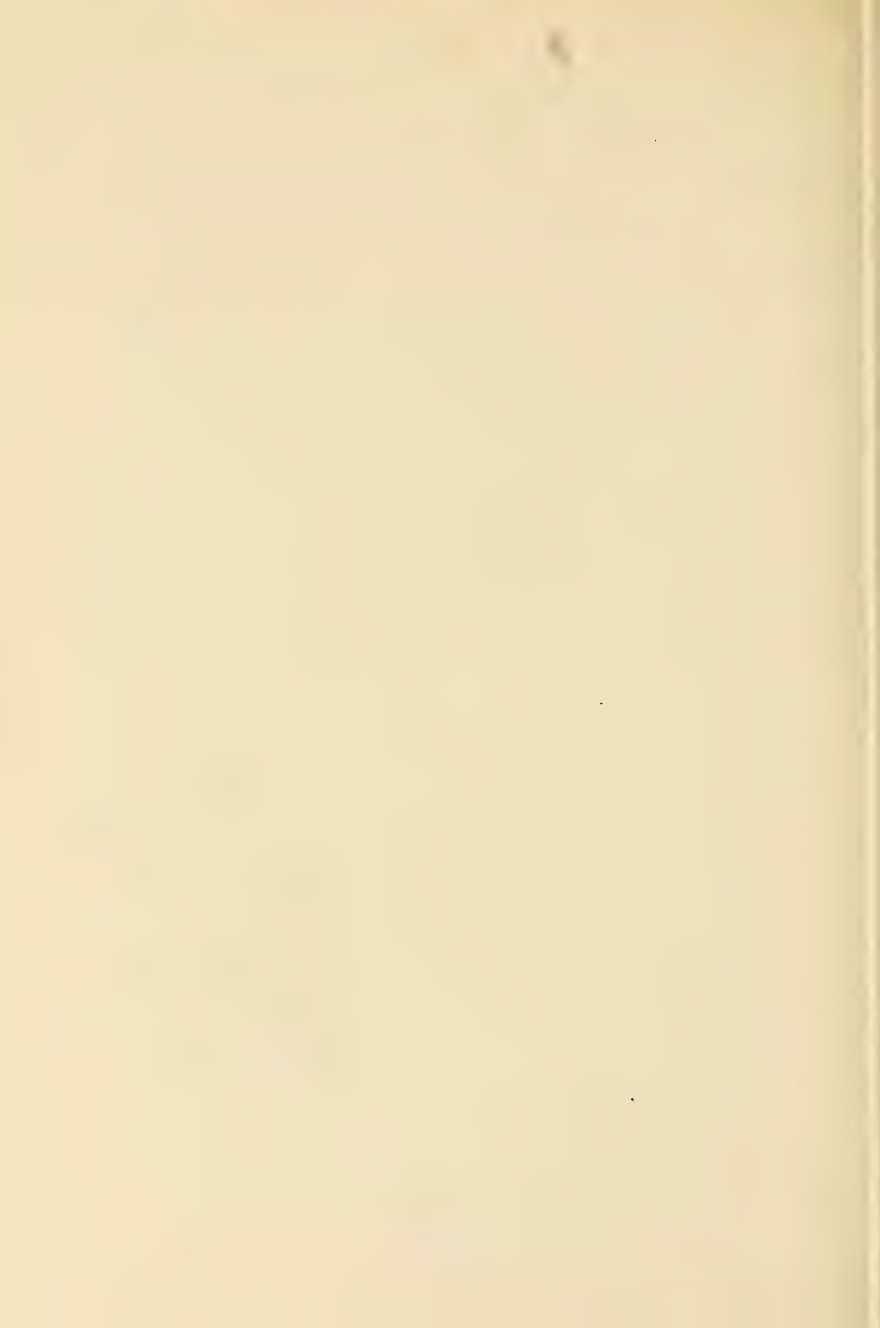
Distribution.—In England in the Lake District;



COMMON BUZZARD.



KITE.



Wales; central and western Scotland; practically extinct in Ireland. Everywhere rare, but less so and more generally diffused at times of migration.

With the large, heavy build of the Buzzard, the dash and agility of the Falcons have vanished. A full-bodied, broad-tailed bird, it perches lethargically for prolonged periods on some dead branch or on a mound; and even when active, as when it soars high in air, it recalls by its slow, majestic circlings the staid ways of the larger birds of prey, such as Eagles, Vultures, and Kites. The Buzzard is a bird of forest-clad and mountainous country, and is still to be found as a breeding species in the Lake District, and in parts of Wales and Scotland, the nest being placed in a tree or on a rocky ledge. It preys upon mice, reptiles, and, more rarely, small birds, which it captures by dropping upon them either from a perch or as it beats over the ground. Birds of this species—generally young ones—are to be met in many parts of the country during migration. The cry, usually emitted as the bird circles high in air, is a melancholy mewing note.

COMMON or RED KITE.—Plate 69. Length, 25 inches. General colour above brown, with ruddier edges to the feathers: darker on lower back, but tail ruddy, long, and deeply forked; flight-feathers blackish; head and neck whitish, with dark streaks: under parts red-brown, streaked longitudinally with darker brown; bill dark and hooked; feet yellow. Resident.

Eggs.—Up to 3, dull white, patched with rusty-brown, mostly at the larger end ; 2.25×1.75 inches (plate 127).

Nest.—Of sticks, with rags, paper, and other rubbish, placed high against the trunk of a tree.

Distribution.—In England in the Midlands and the Marches ; Wales ; and Scotland.

Once common and protected as a scavenger in the London streets, the Kite served man in his filth to be slaughtered by him in his folly. All but exterminated in the British Isles, the species is now represented by a few breeding pairs in the Midlands of England, the Marches, Wales, and Scotland. It makes its nest, a mass of sticks and rubbish, in a tree in the manner of the Common Buzzard, and it is principally in the nesting season that its long-drawn, mewing cry is to be heard. Although a majestic soarer, the Kite trusts to its cunning rather than to its powers of pursuit for the capture of its prey. The latter consists for the most part of small mammals, reptiles, and birds, and any heavier quarry the Kite may come by it owes probably to indirect methods. It is an habitual devourer of carrion. The long, deeply forked tail, visible at any height, at once stamps its possessor as a Kite, there being no other British bird of the Kite's size with such a tail.

OSPREY.—Plate 70. 2 feet. Upper parts deep brown, mixed with white on the head and neck ; a blackish streak running from behind the eye down the neck ; under parts white, with a brown band

across the breast; tail brown, with dark cross-bars; bill hooked and dark; feet bluish. Principally autumn migrant.

Eggs.—2-3, white or buffish-white, variable in markings, but in the more perfectly marked specimens blotched with brown of many rich shades, principally at the larger end, and having underlying patches of purple-gray; 2.5×1.8 inches (plate 127).

Nest.—A pile of sticks, with turf and wool, placed in a tree, on ruins, or on rocks surrounded by inland waters.

The Osprey, or Fishing Hawk, is another grand bird whose extirpation from the British Islands man may deplore or congratulate himself upon according to his lights; for it is too much to hope that the protection now extended by a few landowners in certain parts of Scotland to the remnant that still breeds in our confines can repair the damage of decades of savagery meted out to this fine creature. Its habit is to nest in forest trees and upon rocks within reach of its fishing waters; for the bird preys solely upon fish. Flying about at a moderate height above the water, it stops at times to hover stationarily with depressed tail in the manner of the Kestrel, and upon sighting a fish near the surface, folds its wings and throws itself down upon its prey with a splash, gripping the fish in its claws. Afterward the Osprey rises, shaking the water from its plumage, and makes off to some convenient perch to devour its catch. The Osprey—usually young birds—appears more generally in this country during the winter months, when it frequents inland waters and estuaries. By its fishing

habits the Osprey may be distinguished from all other rapacious birds except the White-Tailed Eagle, also by the pronounced contrast between the dark upper and the white lower plumage.

GANNET—33 inches; a black-winged, white sea-bird, capturing fish by diving from the wing into the sea.

TERNs—8 to 16 inches. These birds also prey upon fish, which they capture with their bills by diving head foremost deep into the water; but the Osprey throws itself upon the water, clutching the fish with its claws.

WHITE-TAILED EAGLE—3 feet; under parts brown; tail broad and white.



OSPREY.

Plate 71.



KESTREL.

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HAWKS AND HAWK-LIKE BIRDS.

KESTREL.—Plate 71. Length, 14 inches. Head and nape blue-gray; upper back and wings ruddy-fawn, with some black spots, but flight-feathers dusky-gray; lower back and tail blue-gray, latter with broad black band across the end; under parts ruddy-fawn, clear on the throat, with thin, black, longitudinal streaks on the breast, and black blotches on the flanks; under sides of wings white, with black spots; bill dark and hooked; feet yellow. *Female*: 15½ inches; lacks the bluish head and tail of the male, these parts, also the plumage of the upper parts generally, being rufous, barred across with darker bands; tail with dark cross-bands, the terminal one broadest. Resident.

Eggs.—4–6, buffy-white in the ground, but usually so much mottled with reddish-brown as to leave little or none of the ground visible; 1·6 × 1·25 inch (plate 128).

Nest.—Often a flattened tuft of grass on a ledge of a sea or inland cliff; among marram grass on sandhills; in cavities in ruins, quarries, and hollow trees; not infrequently in an old nest of Crow or Magpie.

Distribution.—General.

The Kestrel is the commonest and most often seen of the Hawks. It is distributed generally throughout

the British Isles, and nests on the ledges of rocky cliffs or in trees, in the latter case using an old nest of the Magpie, Crow, or Pigeon. It feeds almost exclusively on rats, mice, voles, shrews, frogs, and beetles, searching the ground for them while hovering generally at a height of forty or fifty feet above it. Whilst hovering the bird remains stationary, heading up to the wind, expanding and depressing its tail, and alternately fluttering its wings without moving from its position, and laying them out flat and still so as to poise motionless for a few moments supported by the wind alone. Whilst thus occupied it is the object of attack by many of the smaller birds, which band together and fly about it. But the Kestrel, unregarding, continues its search, and finding nothing to attract it earthwards, circles aside and heads up again to the wind to resume its hovering search. If molested beyond endurance, it darts ahead in rapid flight or bolts into a tree. Having sighted quarry, however, nothing deters it, and it drops in quick stages through the air, at the last like a bolt, and snatching up its prey, bears it, gripped in its claws, to some accustomed perch to devour it. Seen from below, the long tail is very noticeable, and the wings, set high on the shoulders, appear to be almost on a level with the sunken head. At times the bird winds its way up an ascending spiral with a gliding motion, until at a great height it soars on level wings with little or no movement of them at all. It often takes its stand for a considerable time upon a dead branch of a tree. It has a harsh chatter, which it uses when molested by its assailants. *No other British bird has the stationary, hovering flight*

of the *Kestrel*, or *Windhover*, as this bird is sometimes called.

SPARROW-HAWK.—Of about the same size as the *Kestrel*, but darker above and white below, barred with fine, dark, transverse bars; tail with four or five bars; wings blunter and shorter. A bird of the woodside.

SPARROW-HAWK.—Plate 72. *Male*: length, 13 inches. Upper parts dark slaty-blue, with slight white mottling on the nape; larger wing-feathers and tail browner; under parts ruddy-white, barred with close, transverse, dark bars; under sides of wings whitish, with dark spots and bars all over; under tail-coverts clear white; under sides of tail-feathers whitish, with four equidistant dark bars. *Female*: 15½ inches. Grayer generally, brown above, and less darkly barred below. Resident.

Eggs.—4–6, bluish-white, densely blotched, largely at the more rounded end, with reddish-brown; 1.6 × 1.25 inch (plate 128).

Nest.—Of sticks, lined with twigs, and placed next the bole in a high tree. Sometimes an old nest of a Crow or Wood-Pigeon is used as a base for further construction.

Distribution.—General.

The Sparrow-Hawk feeds principally upon small birds, and for this reason, and because of its stealthy mode of attack, habitually frequents the woodside. It is distributed generally throughout the United Kingdom wherever woods occur, and on the borders of these it lurks in the foliage of the trees, waiting

for some bird to come within range. When it does so, the Hawk darts down upon its prey, and, heedless of the small birds that generally gather to chide as it feeds, plucks and eats its victim. At times it gives chase in the open, pursuing its quarry with dash and agility; at others it may be seen scouring the ground or coasting a wood with a close, hugging flight, snapping a bird from its perch or from the grass before it is aware of its enemy's approach. It is seldom possible to get near enough to a Hawk to identify it by any minor feature of form or marking, so that the broader distinctions of size and flight, habits and habitat, must be kept in view for this purpose. It is with the Kestrel that the Sparrow-Hawk is most likely to be confounded, being of about the same size and, like it, generally distributed in fair numbers. Let it, therefore, be remembered that the Sparrow-Hawk builds a stick nest against the trunk of an oak, alder, or pine tree in a wood, and that the Kestrel, though at times appropriating an old nest in a wood, breeds to a large extent on the ledges of rocky cliffs; that the Sparrow-Hawk frequents woodsides, and feeds principally upon small birds captured by stealth, whilst the Kestrel hovers in mid-air above open lands in search of mice; and that the wings of the Sparrow-Hawk are notably shorter than those of the Kestrel.

GOSHAWK—20 inches; just like a larger Sparrow-Hawk, and distinguishable only by its greater size.

KESTREL—14-15½ inches; the male bird of a ruddy-fawn on the upper back and the under parts, the latter streaked with black longitudinally, not barred across as in the Sparrow-Hawk; tail with a single broad black bar at the end.



SPARROW-HAWK.



MERLIN.



MERLIN.—Plate 73. *Male*: length, 11 inches. Head slaty-blue, with a ruddy, black-streaked collar below the nape; upper parts blue-gray; larger wing-feathers black; tail slaty-blue, broadly barred with black at the end; sides of face and of neck, and under parts generally, white, the last with heavy, longitudinal, dark spots; under sides of wings white, with dark spots and bars; bill hooked, dark; feet yellow. *Female*: 12½ inches. The parts that are bluish in the male, in the female are brown. Resident.

Eggs.—4–6, densely mottled with purply-red or reddish-brown; 1.5 × 1.2 inch (plate 128).

Nest.—A hollow among ling or heather on the moorland, sometimes with a little of either about it.

Distribution.—From the Derbyshire hills to the Shetlands; mountainous parts of Wales and Ireland, as well as some of the bog-lands of the central plain of the latter. In winter generally distributed throughout lowlands and around seashores.

The Merlin is the *smallest of our Hawks*, but a sturdy, squarely built bird. A bird of the moorland, it nests on the ground, either on a heathery slope or on a rocky ledge, and ranges from the Welsh mountains and the Derbyshire hills northwards. After the breeding season it is to be met in the lowlands, often by the seashore, and especially at the times of migration, when some of the birds leave the country for the winter. In both situations it preys chiefly upon small birds, flying them down with great dash and pertinacity. This being its principal occupation, the Merlin is as a rule a low flier, darting along-

stream or beside hedgerows in search of small birds, and is little given to soaring flights like some of its kind.

HOBBY—12-14 inches ; dark slaty-blue above ; heavy black moustaches ; under parts ruddy-white, with heavy black spots ; thighs and under tail-coverts clear rust-colour ; wings very long and sharply pointed. A summer visitor to south-eastern England, feeding principally on large insects captured on the wing.

KESTREL—14-15½ inches ; a stationary hoverer over open lands.

SPARROW-HAWK—13-15½ inches ; under parts barred transversely ; wings short and blunt ; a lurker by the woodside for small birds.

HOBBY.—Form, like Peregrine Falcon (plate 74). *Male*: 12 inches. Upper parts and tail dark slaty-gray, lighter on lower back ; heavy black moustaches ; throat, sides of neck, and breast white, the last with heavy, longitudinal, dark streaks ; thigh-feathers and under tail-coverts bright rust-colour ; under sides of wings whitish, barred with black ; under sides of tail-feathers gray, barred transversely. *Female*: similar, but duller, and 14 inches. Summer migrant.

Eggs.—3 - 5, buffy-white, more or less densely mottled with reddish - brown ; 1.6 × 1.25 inch (plate 128).

Nest.—An old nest of a Crow, Magpie, or Wood-Pigeon, with some addition by the Hobby, is used.

Distribution.—In England chiefly in the south-east, sparsely in the Midlands, and increasingly rare northwards ; little observed in Cornwall, Wales, or

Scotland, and then chiefly on migration; all but absent from Ireland.

The Hobby is a summer visitor to England, and while there is practically confined to the south-eastern parts. It nests in trees in woods, whence in the earlier part of its stay it launches itself upon small birds in the surrounding fields, its unusually long, pointed wings enabling it to surpass any of the Hawk kind in the rapidity of its flight. This is such that the Hobby will strike down birds of even the Swallow tribe while flying. It feeds by preference, however, upon large insects, cockchafers, dragon-flies, and the like, capturing and devouring them upon the wing, and these form its chief fare during the summer months. The Hobby's wings, when closed, reach to the end of its tail; and when on the wing, this Hawk may be distinguished from others by its slender form and the greater extent of its finely pointed wings in proportion to the length of its tail.

MERLIN—11 to $12\frac{1}{2}$ inches.

KESTREL—14 to $15\frac{1}{2}$ inches.

Both are more thickly set birds, and lack the long, attenuated wings of the Hobby. The Kestrel is, besides, a stationary hoverer in mid-air.

SPARROW-HAWK—13 to $15\frac{1}{2}$ inches; wings blunt and short; under parts with fine transverse bars.

PEREGRINE FALCON.—Plate 74. *Male*: 15 inches. Upper parts dark blue-gray, blackish on the head and nape, but lighter towards the tail; moustaches black; throat, fore-neck, and a small patch on the side of the neck clear white; under surface of body white, with fine, close, dark cross-bars; under

sides of wings and tail white to silvery-gray, with dull-gray cross-bars, denser at the end of the tail, forming a deep terminal band; bill dark; feet yellow. *Female*: 18 inches. Brown where the male is blue. Resident.

Eggs.—2–4, mottled with orange-brown or red-brown, some of the paler ground sometimes showing through; 2.0×1.6 inches (plate 128).

Nest.—A mere hollow on cliff-ledges inland or by the sea; in cavities in towers and steeples, and in old nests of Crows and Ravens.

Distribution.—General around our coasts where suitable cliffs occur; also on inland rocks in the north of England, and in suitable places throughout Scotland and Ireland. Immature migrants fairly common on the eastern side of British Isles from autumn to spring.

The Peregrine is the prince of Falcons, unsurpassed, even if equalled, in the dash and certainty with which it pursues its quarry. As becomes a bird of larger and more powerful build, it preys upon heavier birds than its congeners—pigeons, grouse, partridges, waders, ducks, and others. It may be most readily identified in the breeding season. Depositing its eggs upon some inaccessible ledge on the face of a steep cliff either inland or by the sea, it keeps a broad lookout, and long ere an intruder has come near the site one or both of the birds leave the cliff with a rasping ‘*Hek! hek!*’ maintained as they fly out over the sea, or continue to beat about between the invader and the nesting-site. As the latter is approached, the



PEREGRINE FALCON.



Plate 75.



HEN-HARRIER.
v



cry is uttered continuously with frantic iteration whilst the bird circles in hovering flight above.

KESTREL—14 to 15½ inches ; also sometimes a breeder on cliffs, but distinguishable by its frequently stationary, hovering flight.

HOBBY—12 to 14 inches ; most like the Peregrine of all Hawks, but notably smaller, a nester in woods, and a preyer upon small birds and insects. A summer visitor.

MERLIN—11 to 12½ inches ; often met on moors behind cliffs, but much smaller.

SPARROW-HAWK—13 to 15½ inches ; a nester in and a prowler beside woods, preying on small birds ; wings short and blunt.

HEN-HARRIER.—Plate 75. Length, *male*, 20 inches. Upper parts clear bluish-gray, becoming white at the root of the tail, the tail itself duller gray ; large outer wing-feathers black ; face and under parts white, the latter washed with blue-gray on the throat and breast ; thighs *plain* white ; under sides of the wings conspicuous by the contrast of the black outer and the light inner wing-feathers ; bill dark and hooked ; feet yellow. *Female*: 22 inches. Brown above, becoming white at the root of the tail, latter having five cross-bars ; region about the eye whitish ; under parts warm buff, whiter towards the tail, with heavy, detached, longitudinal, dark streaks ; the long outer wing-feathers, as seen from below, dark brown, and the short inner ones with dark cross-bars. Both sexes have the Owl-like frill of feathers at the neck. Resident.

Eggs.—4-6, usually plain bluish-white, but occasionally with some yellowish or rusty-brown blotches ; 1.8 × 1.45 inch (plate 128).

Nest.—Of roots, stalks, heather, grass, and wool, in varying proportions, placed on the ground in moorland, often on a slope.

Distribution.—Sparsely on the wilder moorlands of England, Wales, Scotland, and Ireland, descending to the lowlands in autumn, when its numbers are increased by immigrants.

The Hen-Harrier is a bird of the wilder moorlands of Wales, the north of England, and the Scottish Highlands, where it nests on the ground, affecting chiefly marshy tracts. Like all the Harriers, it is a bird of the open country, and when seen searching for the small mammals and reptiles, young birds and birds' eggs, upon which it subsists, beating over the ground carefully with a low, buoyant, but not rapid flight, the male, by its delicate blue-gray upper parts and breast, and its white face and under parts, presents to some extent the aspect of a gray-backed Gull. The Hen-Harrier uses the heavy wing-stroke, and at times the soaring motions, of the Buzzard. When disturbed in its nesting quarters, the male bird, after retreating before the intruder, will return on a straight line as if about to charge, but breaking aside, flies off for a space, to return in a similar manner. The note resembles '*Ker ! ker ! ker !*'

MONTAGU'S HARRIER—18-19 inches. Although resembling the Hen-Harrier in the blue-gray of its upper parts, the throat and breast of Montagu's Harrier are ashy-gray, the remaining under parts and the thighs white, *both* with longitudinal ruddy streaks; wings relatively longer. A bird principally of the south-eastern counties of England.

MARSH-HARRIER.—Plate 76. Length, 21 inches. Head creamy-white, with dark streaks; upper parts brown; the longest wing-feathers blackish; remainder of wing-feathers and the tail silvery-gray; under parts buff, streaked throughout. Principally spring and autumn migrant.

The Marsh-Harrier, formerly nesting abundantly in the fen country and the marshy parts of these islands, is now practically extinct as a breeding species. It occurs, however, as a spring and autumn migrant from the Continent, in the west of England and Wales, beating over the open marsh lands with leisurely flapping wings and at a moderate height above the ground, to which it descends from time to time to capture frog or reptile, small mammal or bird. The presence of a uniformly gray tail and rufous thighs in a bird of these habits distinguishes the Marsh-Harrier from other Harriers appearing in these parts. The under surface of the wings is largely white.

MONTAGU'S HARRIER.—Form, like Hen-Harrier (plate 75). *Male*: 18 inches. Upper parts blue-gray, becoming lighter near the tail, the latter with cross-bars alternately light and dark; the large outer wing-feathers black, the inner ones gray, with black cross-bars; a frill of gray feathers round the throat; throat and breast ash-coloured; under parts white, with ruddy longitudinal streaks; bill hooked and dark; feet yellow. *Female*: 19 inches. Brown above, becoming white at the root of the tail; the latter also brown, with alternately light and dark cross-bars; head, hind-neck, and sides of neck, as

well as the neck-frill, ruddy ; under parts buffy-white, with ruddy longitudinal streaks. Summer migrant.

Eggs.—4-5, usually plain bluish-white, occasionally with some red-brown blotches ; 1.7×1.3 inch (plate 128).

Nest.—A mere hollow in the ground in moorland, with a lining of dead grass and a border of twigs, placed among gorse or heather ; in the fen country the nest is made of sedges.

Rather smaller than the Hen-Harrier, Montagu's Harrier is in many ways so similar that it becomes very difficult to distinguish one from the other by any mark visible at even a moderate distance. Montagu's Harrier is a spring visitant to the south-eastern parts of England, occasionally nesting there, but rarely occurring farther north. The Hen-Harrier, on the other hand, is a bird of decidedly northern range. The general colour of Montagu's bird is ashier, that of the Hen-Harrier bluer ; but the decisive test-marks in fully grown males are the plain white thighs and unspotted under parts of the Hen-Harrier, and the streaked white thighs and under parts of Montagu's. In shape the smaller bird is somewhat slimmer, and has relatively longer wings, and consequently an airier flight. Both, however, being birds of the open, nesting on the ground—preferably in fenny tracts—and seeking their diet of small mammals and reptiles, birds and their eggs, by a low buoyant flight, during which they beat over the ground with equal assiduity, chances of confusion are only too numerous.



MARSH-HARRIER.

Plate 77.



CUCKOO.



CUCKOO.—Plate 77. 13–14 inches. Upper parts blue-gray, becoming dusky-brown on the wings and blackish on the tail, the feathers of the latter spotted centrally and tipped at the ends with white; neck and breast paler blue-gray; under parts white, barred across with black; bill dark, long, pointed, not hooked; feet yellow. Summer migrant.

Eggs.—Very variable, but mostly of a greenish or reddish-gray ground, spotted and blotched with ashy-brown, chiefly at the larger end, and placed singly in the nests of other birds, principally those of the Meadow-Pipit, Pied Wagtail, and Hedge-Sparrow, to the eggs of which, with exception of the Hedge-Sparrow's, they bear at times a general resemblance. Average size, $\cdot 85 \times \cdot 75$ inch, but variable (plate 127).

Distribution.—General.

The Cuckoo comes to us in April, and, wherever it is, advertises its presence indefatigably by its well-known cry. Small birds band together at once to mob it as if it were a Hawk, which in its general appearance it most remarkably resembles. The large size, long tail, feathered legs and yellow feet, the bluish cast of the plumage of the upper parts, the white under parts barred with black, all contribute to the illusion that here is a Hawk. In its passage from one tree to another, its habit of perching thereon for a considerable time, or of traversing an open meadow with low, scouring flight, putting up the small birds as it goes, it enhances by its actions the resemblance it bears in appearance to the Hawks. Nearer inspection, however, reveals the smoother curves of the Cuckoo and

the absence of the Hawk's hooked bill, just as examination of the yellow feet would show that here are no strong claws to grip victims themselves not always weak, but the climbing feet of the Woodpeckers and their like. The note of the female bird is a bubbling sound, often uttered as she flies, and will be at once recognised as resembling the bubbling of fluid poured from a narrow-necked bottle. The Cuckoo occurs throughout the British Isles, is a bird of the open country broken by tree-clumps, bush-growth, and hedges, and when perching on bush or hedge, generally stands at the top in full view, dipping its head and cocking its tail as it utters '*Cuckoo!*' The only birds with which the Cuckoo might be confounded are those of the Hawk tribe; but every Hawk, Falcon, or Harrier has a hooked bill.

OWLS AND OWL-LIKE BIRDS.

BARN OWL.—Plate 78. Length, 14 inches. Upper parts pale golden, clouded with gray and with minute spots black upon white; under parts white. Resident.

Eggs.—Laid successively in pairs, rounded at both ends, and pure white; 1.6×1.2 inch (plate 129).

Nest.—None, the eggs being laid in dark corners of church towers, barns, and similar places; and in cavities in walls, trees, cliffs, &c.

Distribution.—General throughout England, Wales, and Ireland; also the Lowlands of Scotland, but rare farther north.

This is the White Owl, and, as such, if seen in the light, at once distinguishable from other Owls. Being, however, a nocturnal species, it sleeps during the day in barns, outhouses, or church towers, and when it emerges in the twilight is likely to appear as a black rather than as a white bird. Seen against the sky at such times, it shows as a dark, square-winged bird, not using its wings with a full sweep, but with short, quick strokes, and flitting noiselessly with a bat-like flight through the night. It has two common cries, one a screech or rasping yell, to which it will give sudden utterance when flying; the other a long-drawn, hissing or wheezing sound often called snoring; but it is the snore of the heavy breather, not the raucous roar of the finished artist. As this Owl feeds almost exclusively on mice, rats, shrews,

and the like, it is to be looked for where these abound, and is most easily observed in meadows, where it hunts often quite close to the ground, or beats over the hedgerows, pouncing upon the unwary mouse that strays from cover. It also takes small birds and surface-swimming fish. Few country places are without their Barn Owl, which, being a permanent resident and a notorious disturber of the public peace in the quiet hours, soon advertises its whereabouts.

TAWNY OWL—15 inches. A brown Owl of the woods, nocturnal in habit. Cry, clearly spoken '*Too-whit!*' and long-drawn, hollow '*Too-hoo-oo!*' frequently uttered in the evening.

LONG-EARED OWL—14 inches. A buffy-brown Owl of nocturnal habit, generally inhabiting dark fir-clumps; has ear-like tufts of feathers on head. Cry, a cat-like mewling and a sharp bark.

SHORT-EARED OWL—15 inches. A ground-nester, haunting open lands, over which it hunts close to the ground both by day and by night; has smaller head than other Owls, with short ear-tufts. Cry, like a bark.

TAWNY OWL.—Form and colour-scheme generally, resembling those of the Long-Eared Owl (plate 79), but without ear-tufts and ruddier. Length, 15 inches. Upper parts ruddy-brown, mottled with dark brown and gray, mixed with white on the nape, and having two rows of large white spots on the wings; bill light; eyes blackish-blue; facial disc grayish, with brown border; under parts tawny-whitish, mottled with pale brown and streaked with dark brown; larger wing-feathers and the tail-feathers barred across alternately with ruddy and dark brown; legs and

Plate 78.



BARN-OWL.

toes feathered white. There is a class of Tawny Owls much grayer than that described above, but the ruddier bird probably predominates. Resident.

Eggs.—3—4, or more, rounded, plain white; 1.8×1.5 inch (plate 128).

Nest.—None, the eggs being placed in a hollow tree or in old nests of Crows, Magpies, &c.

Distribution.—England, Wales, south of Scotland; not Ireland.

This is the brown Owl of the woods, whose hollow, moaning '*Too-hoo-oo!*' may be heard at evening in most wooded districts of England, Wales, and the south of Scotland. It has also a spirited, clearly articulated '*Too-whit!*' falling little short of the distinctness of speech. Passing the daytime in the hollow trunk of a tree, or sometimes perching huddled against the trunk outside, it issues at evening, after some preliminary calling, to flit and glide about the woodside or in the open in search of mice, frogs, and such small ground-life as stirs abroad in the quiet dusk. It nests usually in a hollow of a tree, though occasionally in ruins, outhouses, and even in the dis-used nests of Magpies and Crows.

LONG-EARED OWL—14 inches. A buffy-brown Owl of the pine and fir woods, with 2-inch tufts on the head, erected like pointed ears. Notes, a cat-like mew and a sharp bark. Eyes yellow; bill dark.

BARN-OWL—14 inches. The 'white' Owl inhabiting barns, outhouses, and church towers. Cries, a rasping screech and a breathing snore.

SHORT-EARED OWL—15 inches. A ground-nester on fen or moorland, hunting over the open land close to the ground, like a Harrier, either by day or night; smaller head. Cries, a loud, laugh-like yell and a baying hoot.

LONG-EARED OWL.—Plate 79. Length, 14 inches. General colour above warm buff, finely mottled and spotted with gray and brown and streaked with dark brown; eyes yellow; facial disc buffy, with dark eye-pits and a dark rim, surmounted by long tufts of plumes like pointed ears; wing and tail feathers with alternate buff and dark-brown cross-bars, the wings having rows of large white spots; under parts buff, heavily streaked with dark brown, the streaks in part crossed by minute straight bars; bill dark; legs and toes feathered, fawny. Resident and winter migrant.

Eggs.—4–6, rounded, plain white; 1.6×1.3 inch (plate 129).

Nest.—None, the eggs being deposited in old nests of Crows, Rooks, Magpies, Ring-Doves, or in a squirrel's drey.

Distribution.—General in wooded districts throughout the British Isles.

The Long-Eared Owl inhabits pine and fir woods in all parts of the British Isles, its numbers being much increased by autumn immigrants. It lays its eggs in the deserted nests of Herons, Magpies, Crows, Sparrow-Hawks, and even of Wood-Pigeons, or in a squirrel's drey, keeping to the darkest parts of the woods. Here it passes the day sleeping, often in close alignment with a tree-trunk, its slim figure contributing further to conceal it. It appears to be less exclusive than other Owls, and many birds will thus pass the day together in some dark fir-tree after the breeding season is past. If the bird be seen, the long head-tufts, the yellow eyes, and long, slim

form suffice to distinguish it from other common tree-haunting Owls. As evening comes on Long-Eared Owls begin to snap their bills audibly and to utter a mewling cry, after which they sally forth to beat over the ground in plain, noiseless flight, searching for small birds, and for rats, mice, and similar ground-life.

TAWNY OWL—15 inches ; light bill ; dark eyes ; no head-tufts ; under parts with heavy dark streaks. Notes, '*Too-whit !*' and '*Too-hoo-oo !*'

BARN OWL—14 inches. The white Owl haunting barns and church towers. Cries, a rasping screech and a breathing snore.

SHORT-EARED OWL—15 inches. Small-headed Owl nesting on fen and moorland, of a buffish colour, densely streaked above and below, and with inconspicuous head-tufts. Hunts low over open ground by day or night. Cries, a laugh-like yell and a baying hoot.

SHORT-EARED OWL.—Form, resembling that of Long-Eared Owl (plate 79). 15 inches. Head smaller than usual with Owls ; face gray, with two inconspicuous tufts of erectile plumes above like ears ; bill black ; eyes yellow, each encircled with black feathers ; upper parts, neck, and upper breast buff or tawny, heavily streaked with dark brown ; lower breast lighter and finely streaked ; belly and feathered legs and toes lighter still, unstreaked ; larger wing-feathers and tail cross-barred alternately with buffish and dark brown. Resident and winter migrant.

Eggs.—6, or more, rounded, white ; 1.6×1.25 inch.

Nest.—Only a depression among heather on the moors or among sedges or reeds in the fens.

Distribution.—Sparingly in south-west England, Wales, and East Anglia; more frequent on the moorlands northwards; commonest in Scotland; not in Ireland. In winter throughout British Isles generally, often in stubble lands and turnip-fields.

The Short-Eared Owl breeds chiefly in the north of England and in Scotland, and is known throughout the British Isles generally as a winter migrant. Frequenting the open country, where it hunts low over the ground in search of birds, and of mice and similar ground-life; going abroad in the day-time as well as at evening; nesting on the open ground in the tufty herbage of the marsh or the heather of the moor, it is likely to be confused with the Harriers rather than with other Owls, the more so because of the reduced size of the head in the Short-Eared Owl, and the inconspicuous head-tufts. It has a free flight, into which it introduces at times something of the twist that marks the flight of the Woodcock. It has a loud, laughing yell, repeated several times in succession, and a hollow, baying hoot, besides uttering hissing and clicking noises when in anger. It is seldom, if ever, that this bird perches in a tree, being distinctly of a ground habit.

LONG-EARED OWL—14 inches; colour-scheme resembling generally that of the Short-Eared Owl, but has 2-inch head-tufts, and the streaks on the under parts are in part crossed by little straight bars; arboreal and nocturnal in habit.

NIGHTJAR.—Plate 80. 10½ inches. General colour ashy-gray, finely spotted and barred throughout with black, dark and ruddy brown; heavy white spot

Plate 79.



LONG-EARED OWL.

11



NIGHTJAR (GOATSUCKER).



at the ends of the three outermost long flight-feathers ; tail long, dark, with large white spots at ends of outer feathers ; head broad and flattened, with short, flat, black bill. Summer migrant.

Eggs.—2, creamy-white, marbled with two shades of brown and with gray ; rounded at both ends ; $1.2 \times .85$ inch (plate 128).

Nest.—Practically none, the eggs being laid on the ground among a few bits of dead fern-stalks or gorse, in a hollow of the turf on grassy slopes, or upon any flat patch in heaps of quarry débris, &c.

Distribution.—Throughout the British Isles in suitable places, but rare in north and west of Ireland.

Arriving in May, the Nightjar distributes itself throughout the British Isles, generally frequenting open ground, preferably stony places and moorland covered with bracken. From its habit of nesting in the latter, its soft, mottled plumage, noiseless flight, and its somewhat owlsh face, with great round black eyes, it has also been called the Fern-Owl. Mottling apart, the general tone of the bird's plumage is gray, and of so neutral a cast as to render it practically invisible when among the drab-coloured stones or rusty remnants of bracken upon which it lies. When the bird is sleeping in such situations during the day-time, often quite exposed to view, the head, with its small depressed bill, presents the appearance of that of a toad ; or the whole bird, lying almost flat to the ground, with long, depressed tail, looks like a lizard. If disturbed, it springs up with a single flick of its wings, and clearing the nearest obstacle with a peculiar glancing, noiseless flight, drops to earth at

once beyond. There it crouches, the great dreamy eyes wide open; or, if it has young near, it drags itself silently about the ground in the most distressing manner. When put up, it sometimes smites its wings together above its back and utters a sound—‘*Co-ic! co-ic!*’ As evening falls the Nightjar perches *along* a bough, rail, or similar support, and utters its far-sounding reel. This is a hollow, throbbing sound, like the gurgling of frogs at evening, or the noise made by a distant reaping-machine, and may be imitated by forcing the breath over the tongue whilst the tip of it is held against the roof of the mouth. The sound is continued indefinitely. At dusk the bird begins its nightly chase of moths and beetles, coasting the woods and skimming the ground as Swallows do when seeking diurnal insects in the same places. The flight is dashing and erratic, and the appearance of the sharp-winged, long-tailed bird is then less like that of an Owl than of a Hawk. This bird is also commonly called the Goatsucker.

PIGEONS AND DOVES.

RING-DOVE, or WOOD-PIGEON.—17 inches. Head and neck blue-gray, with greenish gloss on hind-neck, and a white patch at each side of it; upper parts gray, with white patches on the wings, very noticeable during flight; lower back and tail blue-gray; end of tail banded broadly blackish; breast purplish, passing into pale blue-gray on the belly; bill yellow, with red base; feet red. Resident.

Eggs.—2, rounded, glossy-white; 1.6×1.2 inch (plate 129).

Nest.—A loose platform of crossed sticks and twigs, often in fir and yew trees, but also in many other kinds of trees, as well as in ivy-covering on rocks, walls, &c.

Distribution.—General, though only comparatively recently extended to Scotland.

The Wood-Pigeon is our largest Pigeon. It is a bird of the woodland, constructing a slight platform of sticks for nest, laid on the spreading twigs of some branch, often of a fir-tree, and rushing out with clap of wings when disturbed. Its note, a gurgling '*Roo-cooroo-coo-oo*,' is known throughout the land. In winter its numbers are greatly increased by migrants from the Continent; and, being voracious eaters of grain, the birds are commonly to be seen in the stubble lands and turnip-fields, and beneath oaks and beeches, gathering acorns and mast. The white

patches at each side of the base of the neck are the distinguishing mark of the Ring-Dove.

STOCK-DOVE—13 inches ; no white on hind-neck or wings ; two black spots on each wing ; a little white on the outside tail-feathers.

ROCK-DOVE—13 inches ; lower back white ; black double cross-bar on wing.

TURTLE-DOVE—11 inches ; ruddy-brown above ; pale wine-colour on breast ; patch of mixed black and white at sides of hind-neck ; belly white ; tail-feathers dark—all, except two central ones, tipped broadly white, and the outside ones edged white.

STOCK-DOVE.—13 inches. Head blue-gray ; hind-neck glossy-green ; upper parts drab-gray, but blue-gray from lower back to tail inclusive, the latter broadly banded black at the end, and with a little white on the outside feathers ; two black spots on each wing ; breast wine-colour, becoming clear gray on lower parts ; bill yellow, red at base ; feet red. Resident.

Eggs.—2, rounded, glossy-white ; 1.5×1.1 inch (plate 133).

Nest.—Of roots and twigs, in holes in trees and pollard-tops, in thick ivy, on cliffs and in caverns, in rabbit-burrows and beneath furze-bushes.

Distribution.—Most parts of England ; still working its way up through Scotland ; breeds, albeit sparsely, in parts of Ireland.

The Stock-Dove is less common than the Ring-Dove. It nests principally in woods, using a hole in a tree-trunk in which to deposit its eggs. At

times, however, it will nest in company with Rock-Doves in rocky caverns by the sea, or in the head of a pollard willow, or even in a rabbit-burrow. It is of a more solitary habit than the Ring-Dove, though in the winter it associates with them to feed in the fields, its feeding habits differing little from those of the larger bird. It is the least distinctively marked of the Pigeons, and is most easily to be identified by its negative characteristics. Thus, it has not the white patches that appear at the sides of the hind-neck and on the wings of the Ring-Dove, and it lacks the white lower back and black double wing-bar of the Rock-Dove.

ROCK-DOVE.—13 inches. Gray above, with a greenish sheen on neck and chest; lower back white; tail slaty-blue, barred broadly with black at the end; a black double cross-bar on each wing; under parts gray; bill dusky; feet red. Resident.

Eggs.—2, rounded, white, glossed; 1.5×1.15 inch.

Nest.—Slightly built of twigs, and placed on ledges in cliff-caverns.

Distribution.—In England chiefly, though very locally, along the west coast, appearing on the east coast at Flamborough Head and in Northumberland; Scotland, and the Orkneys and Shetlands; in Ireland fairly general.

The Rock-Dove breeds in caverns in rocky cliffs. Being commonly domesticated, the Rock-Pigeon can

be studied almost anywhere at leisure; and the wild bird, when seen flocking in the stubble lands, often with other birds, or frequenting the weedy back-plots inshore in hard weather, can be recognised at once by the white of the lower back and the bold, black double bar on the wing.

TURTLE-DOVE.—11 inches. Upper parts ruddy; grayer on head, nape, and lower back; small patch of mixed black and white on each side of hind-neck; wings grayish on shoulder, flight-feathers dark; breast wine-colour; belly white; central tail-feathers dark, the outer ones white at the side, and all tipped white at the ends; bill brown; feet red. Summer migrant.

Eggs.—2, creamy-white, one end less rounded than the other; $1.2 \times .9$ inch (plate 129).

Nest.—Slightly built of twigs, and placed on the branch of a tree or in a dense bush.

Distribution.—As a breeding bird, ranges from the south of England up to Yorkshire and Westmorland, but rare or unknown elsewhere.

The Turtle-Dove comes to us in late April as a migrant, and at times of migration occurs more generally. Being of a ruddy appearance and of slighter build, it is easily distinguished from the grayer home Doves. It is a denizen of the woodlands, where it lays on a branch of a tree or larger bush the scanty platform of sticks that serves it for nest, and where its low '*Coo-r-r! coo-r-r!*' may be

heard continually in spring. Like the Pigeons, it feeds in the open, moving with an easy, stepping gait as it seeks its food of grain or seeds in fallow, stubble, or grass lands. It is of a less gregarious habit than the Pigeons, but has all their freedom of wing, roaming far and wide over the land in high flight.

RING-DOVE, STOCK-DOVE, ROCK-DOVE.—All of a generally gray tone, as distinguished from the generally ruddy colour of the Turtle-Dove.

GROUSE.

RED GROUSE.—Form, like the Ptarmigan (plate 82). Length, 16 inches. Head and neck reddish-brown; upper parts chestnut, minutely variegated with spots and bars of black; breast blackish, with white tips to the feathers. Resident.

Eggs.—8–10, or more, buffy-white, densely mottled with umber-brown; 1.75×1.2 inch (plate 129).

Nest.—Only a slight depression in the ground among heather.

Distribution.—On the moorlands of Scotland, northern England, Wales, and less commonly on the moors and bogs of Ireland.

Those who know the Partridge in the lowlands will not fail to recognise much that is similar in form and habits in the Red Grouse; and those who do not will find no other bird with which it could be confounded in the places which it haunts. A small-headed, small-billed bird, full-bodied and round-tailed, with legs feathered to the toes and a red wattle above the eyes, it spends its time on the ground, where it runs nimbly, and where it lays its eggs; its food consists chiefly of the young shoots of heather, above the limits of the growth of which this bird is not found. When put up, it rises with loudly whirring wings in a swift, dead-ahead flight, skimming to earth again in the distance



BLACKCOCK.

Plate 82.



PTARMIGAN.



on hollowed wings. The bird is monogamous, and pairs are encountered only during the breeding season, coveys in autumn, and packs, often very numerous, in the later part of the year. The Red Grouse has the distinction of being the only bird exclusively British.

BLACK GROUSE.—Plate 81. *Male*: 22 inches; black, with a rich blue cast, but dull on the wings; the under parts next the tail and a bar across the wing white; scarlet wattle above the eye; the outer feathers of the tail curved outwards. *Female*: 15 inches; chestnut and buff, barred with black. Resident.

Eggs.—6–10, yellowish-white, spotted all over with orange-brown; 2.0×1.4 inches (plate 129).

Nest.—A slight hollow in the ground under cover of a bush.

Distribution.—Chiefly north of England and in Scotland, though occurring in the midland, southern, and south-western counties of England to some extent.

The Blackcock and Gray Hen, as the male and female birds of the Black Grouse respectively are called, are essentially birds of the woods. They are to be met in the open, especially in stubble lands, which they frequent in the early morning and again towards evening in search of grain, but for the most part they spend their time perching on the branches of trees in woods. During the pairing season the birds resort to special spots in the open in the very early morning,

where the strutting cock, with drooping wings and expanded tail, performs strange love antics in order to captivate a sufficient following of hens for the ensuing season, for, unlike the Red Grouse, the Blackcock is polygamous. With these he may be met feeding in the open, or perching in the wood, until the hens are confined to the nests, which are placed under a bush or some similar shelter. In autumn, however, very large gatherings are encountered in the stubble lands, the family ties having been dissolved for readjustment in the spring. The Blackcock is unique in the possession of his broadly curling tail, and this distinctive mark is absent only during the moult, when for a time the cock assumes in the upper parts the duller and more protective colouring of the hen.

CAPERCAILZIE.—Form, like the Black Grouse (plate 81). Length, 3 feet. Bill hooked, whitish; upper parts generally of a dark slaty-gray; tail blackish, with white spots; scarlet patch above the eye; chest dark, shining green; breast and remaining under parts black, both spotted with white; legs feathered to the toes. *Female*: 26 inches. Head, neck, and upper parts brown, mottled with buff and white; fore-neck and breast chestnut, barred with black and spotted with white. Resident.

Eggs.—6–12, pale reddish-yellow, with spots and blotches of brown; 2.2×1.5 inches (plate 136).

Nest.—A hollow in the ground under shelter of a bush or tree.

Distribution.—Perthshire, Forfarshire, to Loch Lomond, east Stirling, and Fife; extending its range.

The British race of Capercaillies was exterminated about the middle of the eighteenth century. Originally a native species in the pine tracts of the British Isles, it had to be reintroduced from Sweden into Scotland in the early part of the nineteenth century, and the birds now to be seen in parts of that country are descendants from the new stock. The Wood-Grouse, as it is also called, affects principally pine woods, feeding largely upon the tender shoots of the Scotch fir, as well as upon buds and berries of various kinds. It is much given to perching, often high up, in trees, whence in spring, at dawn and sundown, the male bird utters his powerful love-cry, '*Peller! peller!*' expanding and erecting his tail and drooping his wing-feathers like a Turkey-Cock. The female is much smaller and of a ruddy plumage, and deposits her numerous eggs in a hollow scratched beneath a tree or bush. Besides being a third larger than the Blackcock, the Capercaillie has not the lyre-shaped tail of that species.

PTARMIGAN.—Plate 82. 15 inches. In winter entirely white, except outer tail-feathers and a streak across the eye, which are black. Female has no eye-streak. In summer black above, finely mottled with brown and white; wings and under parts white. Red patch over eye at all times. Resident.

Eggs.—8–10, yellowish-white, blotched with dark brown; 1.7×1.1 inch (plate 130).

Nest.—A hollow scraped in the ground, with a few stalks for lining.

The Ptarmigan is an inhabitant of the stony flats on the Scotch mountain-tops, unique in winter as an all but entirely white land-bird ; and, though subject to considerable obscuration at other times, still unique among ground game-birds by reason of its white wings and white under parts. It nests on the ground, is a swift runner, and an adept at clapping down among the stones to hide. Taking wing only when flushed by imminent danger, it springs up with sudden whirl of its violently beating wings, pelts dead-ahead in swift, if laborious, flight, and skims on arched wings as it glides to earth to run forward into hiding again.

Plate 86.



CURLEW.

SWANS.

MUTE SWAN.—Plate 83. 5 feet. All white; black patch between eye and base of bill, including the swollen knob at base of upper mandible; nostril and tip of bill also black; upper mandible reddish-orange; under mandible (little seen) black; legs and feet black. Resident.

Eggs.—3–5 at first, increasing to 10–12 as the female bird develops, dull greenish-white; $4\cdot0 \times 2\cdot9$ inches (plate 130).

Nest.—A great pile of dead reeds, sloping at the sides, and having the cup in the middle, placed on a small island in a lake or among reeds.

Distribution.—General throughout the British Isles.

This is the Swan so well known in the domesticated state; but, as the wild bird breeds in many parts of the Continent, some of those occurring in winter in the British Islands are possibly migrants. All our Swans being white, they are more easily to be distinguished by those parts that are not white—the region between the eye and the base of the bill, called the lores; the swelling at the base of the upper mandible, called the tubercle; the bill itself, consisting of upper and lower mandibles, and the nostrils, occurring as apertures in the upper one; and, finally, the nail or front of the decurved tip of the upper mandible. The nest is a huge, mound-like structure of reeds, bedded in the reedy shallows of large inland

waters, with central hollow, and broad rim sloping like a glacis to the water all round. The young are at first dark, and often borne about on the back of the old birds in the hollow between the raised wings, whence, the wings having been lowered, they are scattered upon the water.

WHOOPER SWAN—5 feet; front half of bill black, remainder yellow; no black between eye and bill.

BEWICK'S SWAN—50 inches; tract between eye and base of bill, and base of bill itself, deep yellow; remainder of bill—i.e. almost the whole bill—black.

WHOOPER SWAN.—Plate 83. 5 feet. All white; front half of bill black; remainder of bill, and the space between the eye and the base of the bill, yellow; the line of division between the black and the yellow portions of the bill descending obliquely forwards; legs and feet black. Winter migrant.

The Whooper or Whistling Swan is a winter migrant from the far north to the coasts and islands of North Britain, passing farther south before hard weather. It is less common in Ireland. Like Geese, the birds fly in wedge-shaped formation, and use a loud, trumpeting note, besides the 'whooping' note from which their name is derived.

MUTE SWAN—5 feet; all white; black patch between eye and base of bill; tubercle, nostril, and tip of bill black; upper mandible reddish-orange; under one (little seen) black.

BEWICK'S SWAN—50 inches; all white; space between eye and base of bill, and base of bill itself, deep yellow; remainder of bill, including entire ridge of upper mandible, black.

BEWICK'S SWAN.—Plate 83. 50 inches. All white; space between eye and base of bill, and base of bill itself, deep yellow; remainder of bill, including the ridge of upper mandible from base to tip, black; legs and feet black. Winter migrant.

Like the Whooper Swan, Bewick's Swan is a winter visitor to our parts, occurring on the Scottish coasts and in the Outer Hebrides, and receding to Ireland in great numbers before keen frost. In its mode of flight and general behaviour it resembles the Whooper, from which it is distinguished, however, by its considerably smaller size. It uses a clanging note, mellower than that of the Whooper.

WHOOPER SWAN—5 feet; space between eye and base of bill lighter yellow; no black ridge running back on upper mandible; the front half of bill alone black, divided from the yellow basal half in a line descending obliquely forwards.

MUTE SWAN—5 feet; bill deep orange-red; black patch before eye; tubercle, nostrils, and tip of bill also black.

LONG-LEGGED BIRDS.

HERON.—Plate 84. 3 feet. Light gray above and white below; forehead, cheeks, and neck white, the last streaked with black before; drooping crest black; large flight-feathers and sides of body black; bill very long, straight, pointed, yellow; legs very long. Resident.

Eggs.—4-5, pale blue, with a greenish tinge; 2.5×1.7 inches (plate 129).

Nest.—Of sticks, lined with roots, twigs, and dry grass, and placed usually in tall trees.

Distribution.—General.

As we have now no Storks, it falls to the Heron to fill the popular rôle of the 'long-legged Stork.' He is to be found throughout the British Islands, both inland and by the sea. He frequents the shore-flats and the borders of the larger inland waters, and may there be seen standing in the shallows, a gaunt, long-necked, long-legged, long-billed bird, the straightened neck held usually stiffly forward at a moderate declination from the perpendicular, and the bill projecting like the arm from a signal-post. Mounted on his stilt-like legs, he waits motionless for an indefinite time, striking suddenly when any unwary water-life comes within reach. If he moves, it is with a gingerly step, one foot at a time. When the bird takes wing, the neck is drawn back between the shoulders in the form of an S, so that the head

Plate 84.



LITTLE GREBE.

HERON.



BITTERN.



alone projects; the long, thin legs are thrown out straight behind; and the great, rounded wings flap with slow and ample sweep, disclosing the black ends of the larger flight-feathers. Heronries, like rookeries, often consist of many nests formed of sticks and placed usually in clumps of high trees, where the great, white birds may be seen standing on long, straight legs full in view on the upper, outer branches. The cry is a harsh, loud '*Fraak!*'

BITTERN—29 inches; general colour ruddy-buff, heavily blotched with black above, lightly streaked below; crown and nape black; chin white; bill and legs long, green. A winter visitor to reed-beds.

AVOCET—17 inches; therefore about a fourth of the size of a Heron. A rare visitor, chiefly to the east coast of England at the times of the spring and autumn migrations; a white wading bird, long-legged, but with black cap and hind-neck; wings boldly marked with solid tracts of white and black; bill long, turned upward at the end.

STILT—13 inches; therefore very much smaller. A white wader, mounted on very long red legs, but black-winged, and with black on the hind-neck and on the nape; bill long, straight, pointed, black. A rare straggler.

BITTERN.—Plate 85. 29 inches. General colour ruddy-buff, much obscured by heavy, black blotches above, but streaked more lightly below; crown and nape black; chin white; large ruff of feathers about the neck; flight and tail feathers tawny, barred across with black; bill large, pointed, green; legs long and green. Winter migrant.

Formerly a breeder in Great Britain, the Bittern is now known only as a migrant which returns regularly

each winter to hide away in the reed-beds where his predecessors once nested. He is so beautifully adapted by his colours and markings to escape observation in his reedy haunts, and must in the past so often have avoided detection from this cause, that he instinctively refrains from rising until flushed by the immediate presence of danger. Then he rises—a great, ruddy, black-marked bird—on broad, slowly flapping wings, the neck drawn in, and the long, green legs thrown out straight behind the short tail. He will have gone but a short distance ere he seeks security in hiding and drops into the reeds again. He has much in build and flight to remind one of the Heron, but in colour and markings is quite unlike it or any other bird that may frequent the reeds. He is a night-feeder, and then comes out of hiding to fish in the shallows, or to catch frogs or mice or any small ground-life that comes within range of his powerful bill. The call-note is a hoarse croak somewhat resembling that of the Raven, but the famous ‘booming’ of the Bittern is heard only where it breeds, and that unfortunately is no longer in this country.

HERON—36 inches. A bird of the water-side, gray above and white below; but, though a feeder at evening, it appears in the open in daylight, and seeks safety in distance rather than in hiding.

BIRDS WITH LONG, CURVED BILLS.

CURLEW.—Plate 86. 21–26 inches. Upper parts variegated with brown, black, and white; lower back white; tail white, barred with brown; under parts white, with dark streaks; bill, equal to about a quarter of the length of the entire bird and curved strongly downwards, brown; legs and feet bluish-gray. Resident.

Eggs.—4, olive-green, blotched with brown and dull green; $2\cdot75 \times 1\cdot9$ inches (plate 129).

Nest.—A depression in the ground among long grass or heather, with a few dead stalks and the like for lining.

Distribution.—General.

The Curlew is resident with us, and is known as a moorland breeding bird pretty generally throughout the British Islands. It is a loquacious bird, especially towards evening. The clear '*Cour-lip!*' sounds far across the still lands it haunts, and is bandied about from bird to bird until it falls away like an echo in the faint response from some more distant one. From time to time a bird gets up from hill-slope or heathy bottom—a brown bird, showing white as it turns—its long neck and long, curved bill stretched out before, its long legs thrown out straight behind, and its wings, also long, and pointed, and sharply bent at the

centre, now beating quickly, now laid out flat as the bird skims forward. The alarm-note opens with detached syllables resembling the word '*Toy!*' and the Curlew repeats them with increasing rapidity, until, with wings laid out horizontally, the bird glides to earth, its cry, as it hovers a moment before settling, being loud, continuous, and laughter-like. At all times of the year the Curlew may be observed on the seashore, walking about the flats near the water, and prodding the mud with its great, arched bill. It occurs also beside inland waters. If the birds fly in company, they form up in the shape of a V, the leader occupying the apex.

WHIMBREL—17 inches; crown dark brown, with broad, light streak down the centre, the crown of the Curlew being entirely pale brown, streaked with dark brown. The Whimbrel occurs chiefly on migration in April-May, and again in August-September. They go generally in flocks, frequenting the mud-flats, and also the grass lands inshore. The note is a shrill 'tittering,' consisting of from four to six short notes and a longer one, repeated.

WHIMBREL.—Form, like the Curlew (plate 86). 17 inches. Crown dark brown, with broad, pale stripe along the top; upper parts dark brown, inconspicuously mottled; lower back and rump white, with dark spots; wings and tail dark; face, neck, and breast whitish, much streaked with dark brown; belly white; bill, equal in length to about a quarter of that of the entire bird, black, and curved sharply downwards; legs grayish-blue. Principally spring and autumn migrant.

Plate 83.

* Y

BEWICK'S SWAN.

MUTE SWAN.

WHOOPEE SWAN.





Distribution.—A few breed in the Orkneys, Shetlands, and Outer Hebrides; elsewhere as a spring and autumn migrant, chiefly on the coasts, but plentiful on the bogs of Ireland during the spring passage.

The Whimbrel is known also as the 'May' bird because of its regular appearance as a migrant at the beginning of that month. The birds linger little on the spring passage, but at the return migration from August onwards they are much more numerous, and some birds remain with us throughout the winter. They feed as a rule in small flocks on the mud-flats at low tide, as well as on the grass lands inshore when the tide is up. The bird occurs occasionally beside inland waters. In form and colouring the Whimbrel so closely resembles the Curlew that the former is scarcely to be distinguished from the latter unless the pale central band along the dark crown be detected. The shy Whimbrel, however, is hardly likely to permit so close observation. It must, therefore, be noted that it is less solitary in its habits than the Curlew, is quicker in flight, and uses a high note often delivered in series of seven, with a rest after the seventh, which has been well called 'tittering,' the note resembling the word 'tetty.' Like the Curlew, the Whimbrel nests on the ground.

CURLEW—21-26 inches; larger; lighter in upper plumage; lacks the broad, pale band along the top of the head. Notes, '*Cour-lip!*' and a long series of high, ringing notes resembling '*Toy—toy-toy-toy-oy-oy-oy-oy-oy-oy*.' A moorland breeder throughout the British Islands.

CURLEW-SANDPIPER.—Form and colouring, much resembling the Knot (plate 108), but the bill in the Curlew-Sandpiper is curved. 8 inches. Head, neck, and back deep rufous, streaked with black; rump white; tail dark; under parts chestnut, whitish near the tail; bill slender, curved downwards; legs dusky-gray. In winter ashy-brown above, except towards the tail, where it is white; under parts white, with fine dark streaks on the fore-neck. Spring and autumn migrant.

Distribution.—A spring and autumn visitor to our coasts, chiefly on the eastern side of Great Britain and at the latter season; appears occasionally beside inland waters.

In spring the Curlew-Sandpiper arrives in its rufous nuptial garb, and in autumn is grayish, or in process of changing its last remaining chestnut patches. In its feeding habits it resembles Dunlins, with which it associates, frequenting the shore-flats in bands more or less numerous, working along the tide-line at ebb, and flying in close formation, with occasional flash of white as the under parts in all the birds are turned simultaneously to view.

DUNLIN—8 inches. Lacks the strong, downward curve of the bill which has earned for the *Curlew-Sandpiper* its name; lacks also its white rump.

KNOT—10 inches. Very similar to the Curlew-Sandpiper both in its summer and in its winter garb, but larger, with stout, straight bill.

HOOPOE.—Plate 87. Length, 11 inches. General colour of head and body, above and below, plain rich buff, but rump and belly white; wings with heavy

transverse bars alternately black and white ; tail black, with white crossbar ; large crest rich buff, opening forwards fanwise, each feather with a white spot before the end and black-tipped at the end ; bill very long and slender, curved downwards. Winter migrant.

Distribution.—A bird of passage at times of migration, principally on the east and south coasts of England ; occurs also in England in the west, and in south Wales, but rarely farther northward ; regular annual visitant to Ireland, chiefly south.

Rufous-buff in almost the whole body, and having black and white markings on wings and tail as bold as those of a tiger-moth, the Hoopoe is quite unlike any other British bird. It is of the size of a Fieldfare, but of even more elegant figure. It feeds in the open, generally on grass lands, and resembles the Starling in its quick runnings hither and thither with depressed head, for ever beating a tattoo on the ground with its long, fine, curved bill searching for grubs and worms. But it has a grace of form and movement quite foreign to the Starling. It goes with a walking, not a hopping, gait. When disturbed, it stands erect, fans its crest forward, then lays it sleekly back, and, with a low, harsh cry, flies off with slowly and deeply flapping wings, so deeply as to pass inwards beneath the body, and to give to its flight the bounding motion of that of some butterflies. Sometimes it twists in flight like an excited Lapwing or sportive Crow. Upon alighting on some lower branch the Hoopoe erects its crest and bobs its head repeatedly. The note is a gentle, fluting ‘*Oo!*’ uttered twice or thrice in

succession, short, but not abrupt, and very mellow. Hoopoes appear annually on migration, and may occur in almost any part of the country.

NOTES TO 'BIRDS WITH LONG, CURVED BILLS.'

CHOUGH.—16 inches ; a cliff-breeder ; entirely black, and resembling the Rook in form. Although it possesses a rather long, curving, red bill, it has been described under 'BLACK BIRDS.'

TREE-CREEPER.—4 $\frac{3}{4}$ inches ; brownish above and white below, with long, thin, curved bill ; but because of its habit of creeping up the trunks of trees, described under 'TRUNK-CLIMBING BIRDS.'



HOOPOE.

Plate 88.



GRAY LAG-GOOSE.



GEESE AND GOOSE-LIKE BIRDS.

GRAY LAG-GOOSE.—Plate 88. Length, 35 inches. Head, neck, and upper parts ashy-brown; the wings at the bend and the rump bluish-gray; throat and breast ashy-gray; sides of body brown; belly white; wing-lining gray; bill flesh-colour, with white nail (the nail is the depressed part at the front of the upper mandible); legs and feet flesh-colour. Resident and winter migrant.

Eggs.—5–6, dull yellowish-white; $3\cdot5 \times 2\cdot4$ inches (plate 130).

Nest.—Of twigs, reeds, and moss, the eggs being surrounded with feathers from the bird's own breast; it is placed among coarse herbage or heather.

Distribution.—North of Scotland and Hebrides; Ireland, in winter, chiefly south and west; elsewhere rarely.

The Gray Lag is the only wild Goose breeding in the British Isles; it does so chiefly in the north of Scotland, being known elsewhere only as a winter visitor. It is gregarious, and feeds by day on grass and grain, occurring commonly in stubble lands. Towards night the birds retire to some open space to sleep, not infrequently the seashore. Like all Geese and Ducks, they fly high in V-formation—that is, with a leader followed by two diverging lines of birds. This is one of four species—two larger and two smaller—of land-feeding Geese of a generally gray colour, dis-

tinguished chiefly by the colour of bill and legs, by the white or dark nail and the presence or absence of a coloured band across the bill, by the lighter or darker tracts of gray at the shoulder and on the rump, and by the presence or absence of black breast-markings. The characteristics for the identification of the Gray Lag are the blue-gray shoulder and rump, the flesh-coloured bill with white nail, and the flesh-coloured legs and feet.

WHITE-FRONTED GOOSE—27 inches; conspicuous white tract about base of bill; bill orange, with white nail; legs and feet orange; shoulder and rump darker; heavy black markings on breast.

BEAN GOOSE—34 inches; bill black, crossed centrally by orange band; shoulder and rump dark; no black breast-markings; legs and feet pinkish-yellow.

PINK-FOOTED GOOSE—28 inches; darker gray on shoulder and rump; bill black, with pink central cross-band; legs and feet pink; no black on breast.

BEAN GOOSE.—Form, like the Gray Lag-Goose (plate 88). Length, 34 inches. Upper parts brown; grayish on head and neck; blackish on lower back; shoulder slaty-gray; under parts grayish-white, with no black markings on breast; wing-lining dark slate-colour; bill black, banded with orange across the middle; legs and feet pinkish-yellow. Winter migrant.

Distribution.—A winter visitor, fairly general, though unevenly distributed round our coasts.

A breeder in the far north, the Bean Goose is found on our coasts only during winter, feeding by day and sleeping at night as described under the Gray Lag-Goose. It affects pasture rather than stubble

lands. Whilst the flock feeds, sentry-birds with up-drawn necks keep a lookout, not feeding themselves until relieved. The flight is performed in the V-formation usual with Geese. The characteristics for identification are the absence of black markings from the breast, and the black bill with orange band and black nail in conjunction with orange legs and feet.

GRAY LAG-GOOSE—35 inches; shoulder and rump light bluish-gray; bill flesh-colour, with white nail; legs and feet flesh-colour; black markings on breast slight.

WHITE-FRONTED GOOSE—27 inches; conspicuously white about base of bill; bill orange, with white nail; legs and feet orange; heavy black markings on breast.

PINK-FOOTED GOOSE—28 inches; lighter gray on shoulder and lower back; bill black, with pink centre; legs and feet pink.

PINK-FOOTED GOOSE.—Form, like the Gray Lag-Goose (plate 88). Length, 28 inches. Like a smaller Bean Goose, but with the gray on the shoulder and lower back lighter; bill black, but with pink central cross-band and black nail; legs and feet pink. Winter migrant.

Distribution.—A winter visitor to the coasts of Great Britain, chiefly to the east coast, and on the east coast chiefly in England; less common on the west coast, and least so in the south.

The Pink-Footed Goose is a winter visitor to our coasts, resembling in its diurnal haunting of the stubble lands, its gregariousness, and its high flight in phalanx formation the other Gray Geese. It sleeps

usually on lonely sand-banks, whither it betakes itself in flocks when the tide withdraws. Its distinguishing characteristic is the pink of the legs, from which it derives its name.

GRAY LAG-GOOSE—35 inches; bill flesh-colour, with white nail and no band across; slight black markings on breast.

BEAN GOOSE—34 inches; bill black, with cross-band yellow; legs and feet pinkish-yellow.

WHITE-FRONTED GOOSE—27 inches; though similar in size, easily distinguished by orange bill, the tract of white about the base of the bill, and the orange legs and feet; heavy black breast-markings.

WHITE-FRONTED GOOSE.—Form, like the Gray Lag-Goose (plate 88). 27 inches. Upper parts grayish-brown; dark slate on shoulder and lower back; conspicuous white tract about the base of the bill; the bill orange, with white nail; under parts whitish, with heavy black markings on breast; legs and feet orange. Winter migrant.

Distribution.—A winter visitor, abundant in Ireland; local in England, chiefly in the south and south-west; local and irregular on Scottish coasts and islands.

The White-Fronted Goose is known to us only as a winter visitant from the north. It is visibly smaller than the Gray Lag-Goose, but its habits generally are as described under that bird, though the White-Fronted Goose has earned for itself the title of Laughing Goose by its more rapidly repeated trumpeting note. The characteristics for the identification of the White-Fronted Goose are the white tract at the base of the bill, the heavy black bars on

Plate 89.



BRENT GOOSE.

the breast, the orange bill with white nail, and orange legs and feet.

GRAY LAG-GOOSE—35 inches ; lighter gray generally, particularly on the shoulder and rump ; black markings on breast slight ; bill, legs, and feet flesh-colour.

BEAN GOOSE—34 inches ; bill black, with orange cross-band and black nail ; no black marks on breast ; legs and feet orange.

PINK-FOOTED GOOSE—28 inches ; bill black, with pink centre ; legs and feet pink ; no black marks on breast ; no white tract at base of bill.

BRENT GOOSE.—Plate 89. 23 inches. Head, neck, and the parts within a line passing the bend of the wings and below the upper breast black, a small white patch on each side of the neck excepted ; general colouring above slaty-brown ; lower back and wing-feathers black ; under parts grayish-brown, mottled with white on the sides of the body ; parts about tail white all round, hiding black tail ; bill, legs, and feet black. Winter migrant.

Distribution.—An autumn migrant to our coasts generally, largely on the east side and south, less commonly on the west ; very common on Irish coasts and estuaries.

The Brent Goose is purely a maritime species, feeding by day in flocks on the shore-flats and in the shallows, and resting out at sea when not so occupied. These birds have the usual habit of Geese of flying in linear formations, often in one resembling a V moving point forwards, and use a clanging '*Honk!*' as they go. The distinctive marks of the Brent

Goose are the black fore-parts, as if the bird had been dipped overhead in ink to the shoulders (the line of division between the black chest and the lighter lower parts being clearly defined), and the small white patch at the side of the neck.

BARNACLE GOOSE—25 inches ; head, neck, throat, and chest black, except forehead, chin, and sides of head, which are white, the last divided by a black line from the eye to the bill ; upper parts barred black and white on ash-gray.

BARNACLE GOOSE.—Form, like the Brent Goose (plate 89). 25 inches. Head, neck, throat, and chest black, except forehead, chin, and sides of head, which are white, the last divided by a black line passing from the eye to the base of the bill ; upper parts ash-gray, cross-barred with black and white ; under parts whitish ; lower back black ; hind-parts before tail white all round, but tail itself black ; bill, legs, and feet black. Winter migrant.

Distribution.—A winter visitor to our coasts generally, chiefly on the west side of Great Britain, and the north and north-west of Ireland.

The Barnacle Goose feeds by night on the salt-marshes and pastures near the sea, but frequents also the margins of rivers and inland waters when the tide is full. Thus it is less exclusively a shore Goose than the Brent Goose, which in its other habits it resembles. The white face and black eye-stripe, in conjunction with the black hind-head, the black neck and chest, and the sharp line of division between the black of

the last and the white of the breast, serve at once to identify the Barnacle Goose.

BRENT GOOSE—23 inches; head, neck, and chest all black, except small distinctive white patch at side of neck; general colour darker; without the clear cross-bars on the upper parts.

COMMON SHELDRAKE.—Plate 90. 25 inches. The column formed by the head and neck marked with three broad encircling bands, sharply defined at their edges—that of the head and upper neck glossy, black-looking green; that of the lower neck white; and the third band rich chestnut, encircling upper back, shoulders, and chest; body white, divided by dark stripe passing along centre of breast and belly to join chestnut patch beneath tail; tail white, tipped black; wings quartered—top fore-quarter black, lower fore-quarter white, top hind-quarter chestnut, lower hind-quarter dark, this last including green speculum-patch; bill brilliant red; legs and feet pink. Resident.

Eggs.—7–12, or even more, creamy-white; 2.75×1.9 inches (plate 130).

Nest.—Of grass or leaves, lined with feathers from the bird itself, and placed at the extremity of a rabbit-burrow.

Distribution.—General where suitable flat shores and nesting-sites occur; numbers greatly increased in winter by migrants from the Continent.

With head and neck banded like sections on a surveyor's pole, its wings quartered like a coat-of-

arms, its white body divided by the dark breast-stripe, not to mention its gaudy red bill and reddish feet, the Sheldrake is clothed in patchwork of the boldest type. It is essentially a coast-bird, nesting in a long burrow in the sandhills (either a rabbit-burrow or one made by the bird itself), and feeding on the shore-flats among the shallow pools left by the tide, the male standing sentry in the daytime, and afterwards accompanying the female with a small, continuous, whistling note on her homeward flight. If she be not engaged in hatching, both may pass the time between tides on or lying beside some inland pool, sleeping or feeding on aquatic growth pulled up from the bottom of the pool. When the young are out both attend them, the male standing sentry when on shore; and when all take to the water, swimming on a broad front, he occupies one extremity, whilst the female occupies the other, of the extended line. The Sheldrake stands between the Geese and the Ducks, but he is more like the former both in his ways and in his looks. There is no Goose or Duck except the Shoveller in any way resembling the Sheldrake either in its colours or in the sharply defined patches in which they are laid on.

SHOVELLER—20 inches. This bird reproduces in a general way the green, white, and chestnut of the head, neck, and chest of the Sheldrake; but in the Shoveller the green occupies the whole neck, the white occurs on the chest as an incomplete band—being broken behind—and the chestnut extends right down the breast; the wings lack the sharp quartering of the Sheldrake, and the bill is lead-colour and flattened out enormously at the end. The Shoveller is a fresh-water Duck.

Plate 90.



COMMON SHELDRAKE.



PINTAIL.

WIGEON.



SURFACE-FEEDING DUCKS.

WIGEON.—Plate 91. Length, 20 inches. *Male*: forehead and crown buff; back of head and of neck, with the face and throat, chestnut; chin black; upper parts finely vermiculated with light and dark gray; white shoulder-patch; speculum green, edged with black; under parts white, finely vermiculated with gray on the sides, but black beneath the tail; bill blue-gray, tipped black; feet dark brown. *Female*: upper parts grayish-brown; head and neck mottled with light and dark brown; shoulders whitish; speculum grayish. In summer the drakes lack the buffy crown, and resemble the ducks in a general way. Resident and winter migrant.

Eggs.—7–10, plain cream; 2.3×1.5 inches (plate 130).

Nest.—Among rushes or heather, lined with feathers from the bird itself.

Distribution.—As a breeding bird in the north of Scotland, and to some extent in Ireland; elsewhere, and everywhere more numerous, as a winter migrant, either on the coasts or inland waters.

The feeding habits of the Wigeon are varied, the bird being both a day and a night feeder, when inland cropping the grass like a Goose or feeding on the surface of the water like a Duck, and when on the coast seeking its food on the tidal flats. The distinguishing marks are the white shoulder conjointly

with the green speculum and the bluish bill. The note is a loud, whistling '*Whee-yu!*'

PINTAIL.—Plate 91. 26 inches. Head, face, and throat brown, divided from the black of the nape by a white stripe running from the crown down the sides of the head and neck to the white under parts; back and sides of body gray, with fine wavy markings; speculum bronze-green, edged with black and white; two centre tail-feathers extending far beyond the others; bill, legs, and feet dark gray. *Female*: mottled brown above; whitish below, mottled on fore-neck and flanks; speculum dull greenish. Male in summer resembles female, but the speculum is always full green. Resident and winter migrant.

Eggs.—7-10, pale buffy-green; 2.1×1.5 inches (plate 130).

Nest.—Among coarse herbage near to, but sometimes at a slight distance from, water, and lined with feathers from the bird's own body.

Distribution.—Known almost exclusively as a winter visitor to the British Islands, principally to the southern shores and estuaries, and to the south and west of Ireland.

The slender build and curiously elongated central tail-feathers of the Pintail Duck have caused it in some places to be called the Sea Pheasant. Although a few pairs are said to breed very locally in Scotland and Ireland, it is principally as a winter visitant to the shores and estuaries of southern England that

this bird is known in our confines. In spite of the fact that it appears at that time in greater numbers on the coast, feeding on the mud-flats, the Pintail is essentially a fresh-water Duck, and is often to be found on inland waters. Here it feeds chiefly on the young shoots of water-plants, its head below water, and its long tail elevated, thus affording easy means of identification. It also visits the stubble lands in autumn for the sake of the fallen grain. It is usually seen in small flocks, and evinces a partiality for the company of the Wigeon. Its cry by night is a low quack, but during the day the bird is little heard. Besides the long central tail-feathers, a long white streak running down the sides of the head and neck affords a means of recognition. The only other of our Ducks that has a similarly long tail is the marine Long-Tailed Duck, but it lacks the white neck-stripe; and the only other Duck with a similar white neck-stripe—the Garganey—has a short tail and the front of the neck and the breast brown.

MALLARD, or WILD DUCK.—Plate 92. Length, 24 inches. Head and neck glossy-green, the latter with a narrow white ring; upper parts brown, finely vermiculated on the upper back; lower back to central tail-feathers inclusive black; other tail-feathers white; wings brownish, with metallic purple speculum bordered with black and white; breast chestnut; remaining under parts white, finely waved with brown; bill yellowish; legs reddish-orange. *Female*: brown, streaked and mottled; wing as in the male. Resident and winter migrant.

Eggs.—8–12, pale gray-green; 2.25×1.6 inches (plate 131).

Nest.—Of grass, lined with down, and placed usually upon the ground near to water, but at times at some little distance from it. Not uncommonly the nest is placed in some higher situation, such as on a pollard, in a hole in a tree, even in an old nest of another bird.

This is the commonest of our fresh-water Ducks, breeding throughout the United Kingdom, its numbers being greatly augmented in the winter by migrants from the Continent. At that time it is found in flocks large and small, frequenting the seacoast, marshes, and lakes. Its food is chiefly vegetable, consisting of various aquatic weeds and plants; but it includes also worms, slugs, insects, crustaceans, molluscs, &c. The narrow white collar is the distinguishing mark of the drake, and this is visible all the year, excepting the period of the summer moult. During that time the drake assumes plumage resembling that of the duck, but in the autumn resumes his own distinctive colouring. This peculiarity is common to all species of ducks, the only broad distinction at such times consisting in the generally darker tone of the drakes.

GADWALL.—Plate 92. 20 inches. Upper parts dusky-brown, finely mottled and vermiculated; lower back darker, becoming black near the tail; cheeks, throat, and chest white, minutely spotted and barred with blackish-gray; remaining under parts white, but



MALLARD.

GADWALL.



Plate 93.



COMMON TEAL

GARGANEY. I



black next the tail, and the sides of the body finely pencilled with dusky lines; tail-feathers dark, edged white; wings dark, with chestnut patch near shoulder; then a black patch, then the white speculum; bill black; legs and feet orange. *Female*: browner generally, and mottled more coarsely. Resident and winter migrant.

Eggs.—8—13, buffy-white; 2.1×1.5 inches (plate 131).

Nest.—Of dry grass, lined with down, and placed either near to or at some little distance from water.

Distribution.—Uncommon save in Norfolk and a few places in the Midlands; in Scotland rare on the eastern side, but more frequent on the western; Ireland, irregularly distributed, chiefly in the west.

Though breeding in Norfolk under protection, the Gadwall is generally known as a rather rare winter visitor to our islands. It associates in flocks, and haunts for the most part fresh-water lakes, skulking by day in the herbage, and feeding by night. It is little seen on the coasts. The Gadwall's pointed wings give it a rapid flight, more so than that of the Mallard, which in its note and appearance it resembles more nearly than any other Duck. Its food consists chiefly of aquatic plants and weeds. The characteristic markings of the Gadwall are the chestnut and black wing-patches, the white speculum both in the male and in the female, though reduced in the latter. The male suffers the usual summer eclipse in its plumage, becoming at that time like the female, but darker.

GARGANEY.—Plate 93. 16 inches. Crown and nape dark brown; white stripe above the eye; remainder of head and neck ruddy-brown, finely streaked with white; upper parts dark brown, with lighter edges to the feathers; wings bluish-gray near the shoulders, remainder brown, with grayish-green speculum between white bars; under parts whitish, with fine dark markings on breast and flanks; bill blackish; legs dark. *Female*: dark brown above, with pale edges to the feathers; face and neck whitish, with fine dark streaks; pale stripe over eye; upper breast blackish, with white edges to the feathers; speculum very dull, but between white bars as in the male. The summer plumage of the male is, as usual, like that of the female, but the speculum is at all times brighter. Summer migrant.

Eggs.—8, or more, cream-colour; 1.85×1.35 inch (plate 132).

Nest.—Among coarse herbage, usually in swampy ground; distinguishable, like those of all Ducks, by the particular kind of down-feathers with which it is lined.

Distribution.—As a breeding bird regularly in the Norfolk Broads and to some extent in Suffolk; possibly in some other counties; best known, however, as a spring and autumn migrant on the east side of England; rare elsewhere.

The Garganey, or Summer Teal, is, as its name implies, a summer migrant, and nests chiefly in the eastern counties of England, occurring sporadically elsewhere, though more generally at times of migration. Flocks of these Ducks usually hug the reedy shores

of inland lakes during the daytime, feeding at night, the food consisting chiefly of aquatic plants. In its ways the Garganey resembles the Common Teal, but may always be distinguished from it by the presence of the blue-gray tract near the shoulder in the wing of the Garganey. It has a swift flight and uses a harsh quack, but in spring emits a jarring sound like a rattle.

PINTAIL DUCK—26 inches. This Duck—a much larger bird—resembles the Garganey in possessing a white neck-stripe, but the fore-neck and breast are white, and the central tail-feathers much elongated.

COMMON TEAL.—Plate 93. 15 inches. Head and neck chestnut, except broad green band curving back from the eye to the nape, this band being edged with a buff line; upper parts minutely variegated with dark and light gray; double line of black and white along the sides of the back, the latter becoming darker towards the tail; wings ashy; speculum green; breast buffish, with heavy dark spots; under parts whitish, but finely variegated on sides of body like the upper parts; buff and black below tail; bill blackish; feet dusky. *Female*: dark brown above, with lighter edges to the feathers; speculum green; under parts whitish, mottled with dark brown on front of neck, breast, and flanks. Resident and winter migrant.

Eggs.—8–10, or more, pale greenish-buff: 1.8×1.2 inch (plate 133).

Nest.—Of grass and leaves, lined with the bird's own down, and placed among coarse herbage or beneath a bush by the water-side.

Distribution.—General.

The Teal is our smallest Duck, breeding generally throughout the British Islands, and being joined by many migrant birds in winter. It affects principally inland waters — lakes, marsh-ponds, and the like, associating in flocks, which, again, associate less intimately with flocks of other species of Ducks. It is chiefly a night-feeder, its food consisting of aquatic plants, slugs, worms, &c. Its call-note is a short '*Crick!*' and its alarm-note a low quack. It is a chubby, squat little bird, and swims with its head drawn down to its shoulders. Its gold-rimmed spectacles, tied, as it were, with a broad green ribbon behind its neck, the whole sharply defined upon the chestnut head and neck, serve at once to distinguish the Teal.

SHOVELLER.—Plate 94. 20 inches. Head and upper neck green; lower neck white in front; hind-neck and back dark brown, with pale edges to the feathers, but becoming black towards the tail; tail black, the feathers white-edged; wings brown, but blue on shoulder, and with green speculum with a bar of white in front; lower breast rich chestnut, becoming white and finally black towards the tail; bill black, flattened out enormously towards the end; legs orange-red. *Female*: brown above, feathers pale-edged; shoulder of wing grayish-brown; speculum dull; under parts brownish-buff, spotted dark brown on fore-neck, and barred with brown on upper breast and flanks. Male in summer resembles the female except in the wings. Resident and winter migrant.

Plate 94.



SHOVELLER (SPOONBILL).



TUFTED DUCK.

SCAUP.



Eggs.—8-14, pale greenish-buff; 2.0×1.4 inches (plate 133).

Nest.—Of grass, lined with down from the bird, and placed among coarse herbage or sedges.

Distribution.—In England nests from Norfolk northwards on the eastern side, in Cumberland, and at a few places in the Midlands; sparingly in Wales, south of Scotland, and Ireland, in the last chiefly in the south.

Though the Shoveller occurs locally as a breeding bird in parts of England, Scotland, and Ireland, it is as a winter visitor that it is more generally known. It frequents lakes and marsh-land waters, feeding in the shallows upon aquatic grasses and weeds, besides worms, water-insects, &c., taken in the process of straining the muddy water through its broad, spoon-like bill. It does not 'duck' its head and breast in the water as do other surface-feeding Ducks. It has a quick flight, during which it utters a guttural '*Puck! puck!*' but it is a slow swimmer. The characteristic markings of the Shoveller are the blue tract near the shoulders in the wings, the green speculum, and the bill, which is longer than the head, and twice as wide near the tip as at the base.

COMMON SHELDRAKE—25 inches. The succession of green, white, and chestnut from head to breast in the Shoveller might suggest the similarly disposed colours of these parts in the Common Sheldrake; but the illustration of the latter will show that these three colours are crowded much farther forward in the Sheld than in the Shoveller.

DIVING DUCKS.

TUFTED DUCK.—Plate 95. Length, 17 inches. Entirely black, except the speculum, the belly, and flanks, which are white; bill, legs, and feet blue-gray; iris yellow. *Female*: brown generally; abdomen whitish. The male resembles the female in summer. Resident.

Eggs.—8–13, greenish-buff; 2.3 × 1.5 inches (plate 132).

Nest.—With the usual lining of the bird's own down, and placed among sedges or other coarse growth; at times beneath a bush.

Though breeding in many parts of England, Scotland, and Ireland where suitable inland waters occur, the Tufted Duck is more numerous in winter as the result of extensive immigration. It may be met on the coasts, but is found chiefly on the larger inland lakes, breeding exclusively in such spots. No Ducks are more easily identified as they sit on the water—little fleets of black craft with white paddle-boxes, the line of division between the black and the white parts springing from the breast, and after arching over the sides of the body, curving down to the black root of the tail, the white parts being thereby defined as a half-moon, with the surface of the water for horizon. The Tufted Duck is a diver, descending to tear up the aquatic growth from the bottom of not too deep water, and bringing it to the surface to dissect. It also feeds largely on animal matter in

the form of small fish, water insects, worms, frogs and their spawn, and anything of a similar nature found in or near to water. There is no other British Duck whose colour is made up of single, solid tracts of black and white, and the presence of the black crest in a Duck so marked is decisive.

SCAUP—18 inches. Resembles the Tufted Duck in its black head, neck, upper back, and breast, white speculum and white under parts, but is distinguished from it by the fine zigzag lines in black and white of the upper parts, giving them a gray look. It is without crest, and is found only on the coast, where it appears as a winter visitant.

SCAUP.—Plate 95. 18 inches. Head, neck, breast, and upper back black ; upper parts gray in appearance, due to fine black cross-lines upon a white ground, but becoming plain black towards the tail ; wings dark, with white speculum, the latter bordered with brown ; under parts white, except beneath the tail, where black again occurs ; bill and legs gray. *Female*: brown where the male is black, but with clear white patch where the bill joins the head. Males in the moulting, or summer plumage, resemble the females. Winter migrant.

Distribution.—General round our coasts, but few are found in the south of Ireland.

The Scaup is essentially a maritime species, resorting to inland waters only to breed. It does not, however, breed in this country, though a common winter visitor to our coasts. At that time it may be met, always in flocks more or less numerous, on the tidal flats and about estuaries, where it feeds

upon shellfish, crustaceans, &c. Like marine Ducks generally, the Scaup is an excellent swimmer and diver, diving not only for safety when threatened by danger, but also for its food, a large part of which is found under water. Its flight is rapid, and is achieved by violent wing-strokes, which produce a whistling sound as the birds pass overhead. The cry is extremely harsh, resembling the word '*Scaup*.'

TUFTED DUCK—17 inches. Though resembling the Scaup in a general way, it has a crest, is uniformly black above instead of gray, and occurs principally on inland waters.

POCHARD.—Plate 96. 19 inches. Head and neck chestnut-red; upper back and upper breast black; back with fine black cross-lines on a whitish ground, becoming black towards the tail; tail dark brown; wings grayish-brown, grayer on the shoulders, with gray speculum; under parts white, finely cross-lined with black, clearer on the belly; black beneath tail; bill black, crossed by a blue-gray band; legs blue-gray. *Female*: ruddy-brown on head, neck, upper back, and upper breast; whitish face and fore-neck; remaining plumage generally as in the male, but browner. Resident and winter migrant.

Eggs.—7–10, or more, greenish-drab; 2.4×1.7 inches (plate 134).

Nest.—Lined, as usual with Ducks, with down from the bird's own body, and placed among sedges, rushes, or other coarse growth beside lakes.

The Pochard, though breeding in some numbers on inland waters in many parts of the United

Plate 96.



COMMON POCHARD.

GOLDEN-EYE.

Plate 97.



VELVET SCOTER.

LONG-TAILED DUCK.

Kingdom, becomes common only when the winter migrants come in. Then it may be found on our coasts, but much more commonly on inland waters, where it flocks in parties more or less numerous. It is a swimmer and a diver of the first order, forging along at a remarkable pace with neck drawn in and body sunk low in the water. Though principally a night-feeder, it may be seen during the day diving assiduously in suitable places, bringing up from the bottom of the lake or pool portions of aquatic plants to be overhauled at the surface. At home in the water, Pochards are ungainly walkers, their legs being set far back, as in most divers. Their wings, too, as is the case with such birds, are set well back, so that they rise with difficulty; but when once under way they proceed with great force and speed. Besides vegetable food, they eat water insects, worms, grubs, shellfish, and other small life occurring in and about water. The distinguishing characters are the rich chestnut head and neck, with the gray back, the gray speculum, and the blue-banded bill. No other common British Duck has the Pochard's rich chestnut head and neck, based on a bold black ring such as runs round the breast and upper back of this bird.

GOLDEN-EYE.—Plate 96. 18 inches. Head and upper neck dark green; chin and throat black; large white circular patch at the base of the bill; upper parts black, streaked black and white along the sides of the back; wings black, with large white patch; under parts white, the feathers being black-edged

on the upper and becoming brown on the lower flanks; bill bluish-black; legs and toes orange-yellow. *Female*: dark brown above, with the white wing-patch, but without the white face-spot, of the male. Winter migrant.

The golden eye of the bird so called is not distinctive, its congeners having similarly bright-yellow eyes; but the white facial spot and the simple, pronounced markings of this Duck place it almost beyond the possibility of confusion. It is a winter visitor principally to inland waters, but is found also on the coasts, especially when frozen out of its fresh-water haunts. It is a splendid diver and swimmer, using its diving powers to procure its food, which consists of the soft shoots of aquatic plants, small fish, frogs, shellfish, &c. It flies with violent wing-beats, the wings producing a whistling noise as the bird passes. The cry is harsh, like those of the Scaup and Tufted Duck. The back of the head appears to bulge out beyond the usually smooth curve of a Duck's head, this being due to a full, though not long, crest, of which the feathers are, as it were, brushed back beyond the contour of the head itself. The Golden-Eye has the, for a Duck, remarkable habit of at times nesting at a considerable height above the ground, either in a hole in a tree-trunk like a Woodpecker, or on a pollard willow.

LONG-TAILED DUCK.—Plate 97. 17 inches. Head and neck white; grayish on the face, sides of neck, and on the hind-neck; black, detached patch

about the ears ; upper parts black, including two central tail-feathers extending 5 inches beyond the remaining tail-feathers, which are white ; a white band of long, drooping feathers at each side of the back : wings, fore-neck, chest, and breast black ; remaining under parts white, shaded light gray ; bill blackish-gray, pink in the middle ; feet dark gray. *Female* : brown ; crown and chin dark ; sides of head whitish ; dull white stripe over the eye ; under parts white ; tail not elongated. Winter migrant.

Distribution.—England, chiefly east coast ; Scotland, east and west sides, common in the Hebrides ; Ireland, rare and irregular.

The Long-Tailed Duck is a winter visitor from the far north, and whilst with us is of exclusively marine habit. It occurs chiefly on the west coast of Scotland, and occasionally on the north coast of Ireland. It is a notable diver, and since its food consists principally of small life captured in the sea, the bird is not restricted to shallow waters, as is the case with those divers into whose diet vegetable fare largely enters. The long tail, and the long drooping white plumes at the sides of the back, suffice to identify the Long-Tailed Duck, even if its simple, strongly contrasted scheme of coloration and pink-centred bill be not satisfactorily observed.

PINTAIL DUCK—26 inches. Resembles the Long-Tailed only in the length of the central tail-feathers ; but, besides being a much larger bird, it has brown head and face, with long white stripe down the sides of the neck ; back and sides of body gray ; wing with green speculum. It occurs principally on the south and east coasts of the British Islands, where the Long-Tailed Duck is little known.

EIDER DUCK.—Plate 98. 25 inches. Crown black, divided behind by a broad, greenish-white streak; face and throat white; nape pale green; upper parts white, but black towards the tail; tail black, with a white spot on each side; wings black, with white at the bend and along the inner edge; chest rosy-buff; under parts black; bill, legs, and feet olive-green. *Female*: brown, mottled with blackish centres to the feathers; lighter brown underneath. Resident.

Eggs.—5-8, green; 3×2 inches (plate 131).

Nest.—Of fine grass and seaweed, lined with the well-known 'eider-down,' and placed usually on low islands near to water.

Distribution.—As a breeder from the Farne Islands to the north of Scotland, also on some of the islands on the west of Scotland; known only as a winter visitor in small numbers on the west and south coasts of England and on the Irish coast.

The Common Eider Duck is a resident breeding species from the Farne Islands to the Shetlands, and also on the islands on the west coast of Scotland. It is a thorough sea Duck, gregarious at all times, but more so in winter, frequenting shoals, where it dives to take crabs, shellfish, and crustaceans. Flying low over the water, it may travel far from land, its presence at any spot being determined solely by the fact that the sea-bottom is accessible to the bird when diving, and not by its distance from the shore. It goes rarely to land, and then only at night or in the breeding season. Usually a silent bird, it emits

Plate 98.



EIDER DUCK.

2c



SMEEW.

RED-BREADED MERGANSER.

GOOSANDER.



when courting a loud note not unlike the cooing of a Pigeon, as it swims round its mate, bobbing its head up and down. When moulting the male resembles the female in its plumage, though there is generally some admixture of black and white. At that time he keeps well out to sea. White above and black below, with green nape and rose-tinted chest, and with whitish head with black cap, the Eider is quite unlike any other of our marine Ducks.

COMMON SCOTER.—Form, like the Velvet Scoter (plate 97). 20 inches. Entirely black; bill black, with a swollen knob near the base, and with yellow centre to the upper mandible. *Female*: dark brown above; under parts paler, with light edges to the feathers; sides of face and throat dirty white. Resident and winter migrant.

Eggs.—6 - 9, yellowish - white; 2.5×1.8 inches (plate 133).

Nest.—Of grass and moss, with lining of the bird's own down, placed among coarse growth on an island in a mere or in swampy places about its border.

Although a few Common Scoters breed in the north of Scotland and immature birds remain about our coasts during summer, this Duck is known principally as a winter visitor in thousands to the east coast of England and the north coast of Ireland, being, in fact, our commonest sea Duck. It occurs regularly, but is less numerous, on other parts of our coasts, and is uncommon in the south of Ireland. It is essentially

a marine species, keeping well off-shore in fair weather, and diving for its food in deep water. It is the only Duck with plumage entirely black.

VELVET SCOTER.—Plate 97. 22 inches. Entirely black, except large white patch on wing, and small white spot beneath the eye; bill pale orange; legs and toes orange-red. *Female*: blackish-brown, but lighter underneath, and with whitish patch on face; white patch on wing less conspicuous than in the male. Winter migrant.

Velvet Scoters come in with Common Scoters as winter visitors, chiefly to the eastern coasts of the British Islands, but they are less numerous than the Common Scoter. They, too, are deep-water divers, feeding chiefly on molluses. Although resembling the commoner bird in colour, size, and, to a large extent, in habits (Velvet Scoters are not so exclusively marine), they are at once distinguishable from the Common Scoter by the presence of the white wing-patch and eye-spot.

DUCK-LIKE DIVING BIRDS.

GOOSANDER.—Plate 99. 26 inches. Head, slight crest, and upper neck dark green; upper back black; remaining upper parts ashy-gray; tail ash-brown; larger flight-feathers ash-gray; remainder of wing white, the feathers partially tipped or bordered with black; lower neck and under parts white, flushed with pale salmon, but becoming grayish-white towards the tail; bill long, narrow, hooked at the end, full red; feet also red. *Female*: head, crest, and upper neck light chestnut; upper parts ash-gray; under parts white. Resident and winter migrant.

Eggs.—8–13, buffy-white; 2.6×1.8 inches (plate 132).

Nest.—Of weeds and moss, lined with down from the bird, and placed in a hole in a tree-trunk or on a ledge of rock, usually near to water.

Breeding to some extent in the Highlands of Scotland, the Goosander is better known as a winter visitor occurring plentifully on the west of Scotland, and occasionally on the English and Irish coasts. It is of a slimmer build than is usually associated with the name of Duck, having long and slender bill and neck. The feet being set far back, the bird stands erect as compared with an ordinary Duck. Feet so placed indicate uncommon swimming and diving powers, and the Goosander belongs to a type of

bird including the Grebes and Cormorants, all fine swimmers and divers, progressing with body sunk very low in the water, and diving with scarcely a ripple to capture fish which they pursue for long distances under water, the bird emerging at a considerable distance from the spot where it disappeared, and usually after a lapse of about half-a-minute.

RED-BREASTED MERGANSER—24 inches; chest rufous, streaked with black; a conspicuous patch of white feathers bordered with black near the shoulders.

GREAT CRESTED GREBE—21 inches; conspicuous divided crest; face white; outstanding tippet around the throat.

RED-BREASTED MERGANSER. — Plate 99.
24 inches. Head, crest, and upper neck dark green; white collar on the neck, interrupted behind by a black line passing down the back of the neck; back black; a patch of white feathers with black borders just before the shoulders; the larger flight-feathers blackish-brown; remaining feathers of the wing white, barred with black; chest rufous, streaked coarsely with black; sides of body and lower back to the tail white, with fine, wavy, black lines; under parts from the breast white; bill long, narrow, hooked at the end, bright red, tipped with black; feet also bright red. *Female*: head and neck rufous, whitish on the throat; upper parts dull brown, with a white patch on the wing; lower parts white. Resident and winter migrant.

Eggs.—Up to 10, greenish-drab; 2.5×1.7 inches.



GREAT NORTHERN DIVER.



Nest.—Lined with drab-coloured down from the bird, and placed under cover of rocks, or among rough herbage on the borders of loch and lough, or on the seaboard.

The Red-Breasted Merganser is known as a breeding species in the north and west of Scotland, and in Ireland, frequenting for that purpose inland lakes and estuaries, as well as the seacoasts. In winter it visits the English coasts, but seldom goes inland. It is formed more slimly than is usual with Ducks, both the bill and the neck being slender, and the bird's habit of swimming with the body half-submerged adds to this effect. The feet, set far back, point to more than ordinary swimming and diving powers, which are amply demonstrated when the bird remains under water for half-a-minute at a time to pursue the fish upon which it mainly subsists. Its unusual swimming and diving powers are ample compensation for the awkward gait with which it walks about in the shallows searching for molluscs. It is usually seen in small parties, being of a sociable disposition.

GOOSANDER—26 inches; chest white; no ornamental patch of black-bordered white feathers at the bend of the wing.

GREAT CRESTED GREBE—21 inches; conspicuous divided crest; ruffled-out tippet at the throat; face white.

SMEW.—Plate 99. 17 inches. Head, neck, and under parts white, but patch behind base of bill, the hind-part of crest, and a band on each side of the

breast black ; back black, becoming gray towards the tail ; wing white at the bend, then black, with fine white wing-bar, the flight-feathers being dark ; under parts white, with black wavy lines on the sides of the body and on the flanks ; bill, tapering and hooked, bluish-gray ; legs and feet also bluish-gray. *Female* : brown above, ruddy on crown and nape, and grayish on upper back ; rest resembling male, but the breast shaded with gray. Winter migrant.

The Smew is a winter visitor, principally to our eastern coasts, the birds being generally young ones, which resemble the female in plumage, but lack the dark face-patch. The Smew resembles the Goosander and Red-Breasted Merganser in form and in its gregariousness ; and, like them, it is pre-eminently a swimmer and a diver. These faculties it applies similarly to the capturing of fish, which it pursues beneath the water during long submersion, propelling itself by means of its wings through a great space ere it reappears. The Smew rarely comes inshore or to land, being a poor walker ; and, when disturbed, it usually effects its escape by diving. Nevertheless, it has a free and rapid flight, and rises easily from the water as a consequence of its narrow, pointed, slightly curved wings. The form of the latter affords valuable aid in identifying the bird when seen in flight. The Smew further resembles the Goosander in its remarkable habit of nesting in holes in tree-trunks. In point of appearance, however, the white-headed, white-necked Smew, with black-patched face and blue-gray bill, is as far removed from the dark-headed Goosander, with its red bill and feet, as it is

from the Red-Breasted Merganser, which is similarly coloured in the parts mentioned.

GREAT NORTHERN DIVER.—Plate 100. Length, 33 inches. Bill long, pointed, black; head and neck glossy-black; two collars crossed by lines alternately black and white; upper parts black, symmetrically spotted with white; under parts white; legs and feet greenish-black. Winter migrant.

Though said possibly to have bred in the Shetlands, the Great Northern Diver is known chiefly as a winter visitor to our coasts, and to the larger and more wildy situated inland waters. Incapable of progressing on land, save in a scuffling way, because of the backward position of the feet, and rising reluctantly and laboriously in flight, it lives on the water, sinking itself deeply when apprehensive of danger, and effecting its escape by diving, to appear far from the spot where it disappeared. Those who know the commoner Great Crested Grebe will recognise in the Divers a similarly long, boat-shaped body, the same habit of swimming with the body sunk low in the water, the same instantaneous and rippleless disappearance in diving, and the same habit of travelling long distances under water in pursuit of fish. When afloat they look like large Ducks, but the greater length of neck and body, that of the latter exaggerated through its being set so deeply in the water, gives them a more elegant appearance. If forced to take wing, they beat along the surface of the water for a great way

before being able to rise, and never go to land except in a dragging passage to and from the nest, which is placed a few yards from the water's edge.

BLACK-THROATED DIVER—27 inches ; gray on head and neck, contrasting with black throat. Breeds on the lochs in the north of Scotland, coming south in winter. Habits generally as Great Northern Diver. Eggs, 2; 3.25×2.15 inches (plate 131).

RED-THROATED DIVER—23 inches ; upper parts brown, streaked and spotted with black and white ; throat and sides of neck plain gray, with a bright ruddy patch from throat to fore-neck ; under parts white. Breeds on the Scotch lochs, coming south to the English coasts and inland waters in winter. Habits generally like those of Great Northern Diver. Eggs 2; 2.75×1.8 inches (plate 131).

GREAT CRESTED GREBE.—Plate 101. Length, 21 inches. Crown and crest dark brown ; tippet round the throat chestnut, dark-edged below ; upper parts brown ; a conspicuous white patch in the wing when opened ; face, fore-neck, and under parts white ; bill red. Resident.

Eggs.—3–5, white when laid, but soon becoming sullied in the nest formed of decaying reeds and flags, and placed in or on the water about the sides of lakes. The eggs measure 2.2×1.5 inches (plate 133).

The Great Crested Grebe is known as a breeding bird on the larger meres in many parts of England and Ireland, and less commonly in Scotland, whilst





STONE-CURLEW.



in winter it appears also upon the seas about our coasts generally. Except when occupied with its nest in the reeds, the Grebe keeps to the open water, the sharp-billed head at right angles to the long, perpendicular neck, and the low-curved back little above the surface of the water. Even at a distance the divided crest appears plainly when the bird turns beak-on towards the observer, looking like hair parted down the middle. The bright-chestnut expandible ruff below the throat is clearly visible at all angles. As the bird swims the head is continually turned to one side or the other to keep watch. At intervals it dives, yet scarcely dives so much as disappears, going down instantaneously and with no disturbance of the water. After fifteen to twenty seconds it reappears some ten to twenty yards ahead. In spring the male and female birds have peculiar love antics, facing one another, ruffing out their tippets, and after shaking their heads, fencing playfully with their long bills. When the young are out, the old bird sometimes takes them for a sail on its back, its wings heaved up to form a bulwark. After a while, laying its neck straight along the surface of the water, it trumpets loudly '*Kek ! kek !*' and down drop the bulwarks and overboard go the youngsters. The old birds dive continually, bringing up small fish, to receive which the nearest young one swims quickly to meet them. They bring up also aquatic plants and overhaul them at the surface. The crest and ruff, and the long, low-sunk body, of the Great Crested Grebe are sufficiently characteristic to cause it to be readily distinguished from any Duck or Duck-like bird.

DABCHICK, or LITTLE GREBE.—Plate 84. 9 inches. General colour dark brown; blackish on head, hind-neck, and chin; cheeks, sides, and front of neck chestnut; belly silky-white; bill black, tipped with white, and greenish-yellow at the base; legs and feet (the toes formed like paddles) blackish-green. Winter: crown and hind-neck brown; chin white; chestnut parts become ruddy-brown. Resident.

Eggs.—4–6, creamy-white; 1.5×1.0 inch (plate 134).

Nest.—A mass of decaying aquatic plants floating on the water among the growth at the borders of lakes, streams, and ponds.

This sooty little Grebe may be found breeding on any reed-grown pond, lake, or water-course throughout the British Islands, thinning out northwards. When seen for the first time, its small, rounded form, with fluffed-up plumage, no proper tail, and the head nestling between the shoulders, will probably be mistaken for that of a Duckling. But when, upon the barest hint of intrusion upon its privacy, it dives noiselessly and without disturbance of the water, and with the rapidity of a flash of lightning, usually to appear no more within sight, it will be understood that this is an 'old bird' in a special sense of the term. The nest is a mass of wet reeds floating or built up from the bottom of a shallow among the reeds. Much smaller than the smallest Duck, and with a pointed bill such as no Duck possesses, and a mere pigmy beside Moorhen and Coot which fre-

quent similar spots, the Dabchick cannot be confounded with any of them.

NOTES TO 'DUCK-LIKE DIVING BIRDS.'

COOT.—A black, fresh-water bird, swimming and diving like a Duck, with white patch on forehead. *Vide* 'BLACK BIRDS.'

MOORHEN.—A bird frequenting ponds and lakes, where it swims and dives like a Duck. Plumage blackish, except white streaks at side of body and white patch beneath tail; bill red. *Vide* 'BLACK BIRDS.'

FORE-NOTE TO RUNNING BIRDS.

Birds have two modes of progression on land, either a hopping with both feet at once, or a stepping gait in which the feet are used one after the other.

Of those that use a stepping gait, some walk, others run.

The birds of the following two sections, 'Shorter-Billed Running Birds' and 'Long-Billed Running Birds,' are all notable runners; they never hop; they rarely (unless quietly feeding) proceed at a walking pace, but almost always move with a quick, gliding run. They are all ground-birds, either of the seashore, the fields, heath, marshland, or moor.

The birds here called shorter-billed running birds have bills shorter than the head; the long-billed ones have bills as long as or longer than the head.

SHORTER-BILLED RUNNING BIRDS.

STONE-CURLEW.—Plate 102. 16 inches. Upper parts pale sand-colour, with black streaks; wings dark brown, with two inconspicuous white bands on the opened wing; white streak above and another below the very large yellow eye; under parts white; rufous on the fore-neck, which is streaked with black; bill

yellow, tipped black; legs long, yellow, swollen at the knee. Resident and summer migrant.

Eggs.—Usually 2, pale buff, blotched and streaked with umber-brown and some gray; 2.1×1.5 inches (plate 132).

Nest.—Merely a hollow scratched in stone-littered ground.

The Stone-Curlew is known as a summer visitor to the southern and eastern counties of England, though a few birds remain during the winter in Cornwall. It haunts open arid lands, stony heaths and wolds, and broad shingly beaches, where it feeds principally on animal matter in the form of insects, worms, snails, &c. The strikingly large eye is without doubt connected with the twilight habit of this bird, for it is particularly active at evening. It is a great runner, and has the habit of clapping down with extended neck to hide, a trick common with young birds of all the Plover and Snipe kinds, though not often practised by grown birds. If by chance Stone-Curlews be surprised, they fly only a short way ere coming to earth to run forward and, sinking down, flatten themselves out among the stones, or in any barren spot harmonising with their own colouring. Except in point of size the Stone-Curlew resembles the Common Curlew only in its long, loud Curlew-like cry, heard chiefly at evening. The thickened joint in the legs, particularly observable in young birds, and abnormally large, bright-yellow eyes of the Stone-Curlew are found in no other running bird. Such of the birds as migrate flock in early autumn, and take their departure in October.

GOLDEN PLOVER.—Plate 103. 11 inches. Upper parts finely mottled with black, white, and yellow; forehead and stripe over the eye white, the latter running down the sides of the neck to the sides of the body, which also are white; face, front of neck, breast, and belly all black; sides of breast mottled black and yellow; bill and legs black. In winter the black of the under parts is absent, and the general appearance of the birds is lighter and browner. Resident and winter migrant.

Eggs.—4, pear-shaped, yellowish stone-colour, densely blotched with umber-brown; 2.0×1.4 inches (plate 131).

Nest.—Merely a depression in the ground among short grass, heather, or bare earth, with a scanty lining of bits of dead stalks, heather, and similar material.

The Golden Plover breeds on the moorlands throughout the United Kingdom, but only in small numbers on the higher grounds in the south of England. Several pairs often nest near one another, maintaining a loose association even during the breeding season. Like Lapwings, their associates both in their summer and winter haunts, they place their eggs on the ground, in a slight hollow in the herbage, the male generally standing on some small eminence to give warning by a melancholy '*Köp!*' when any one approaches. Then the female bird slips from the nest, and, running with lowered head, takes wing only when some distance from it. Any other pair in the neighbourhood take the warning sign, and, rising, pass it on. If the young are out, vociferous

outery and excited flying and running hither and thither ensue. British birds go south in autumn, and their places are taken by a large immigration from the north. At this time, owing to admixture of young birds, the predominance of yellow in the backs, and the absence of the black from the under parts of old ones, the colour of the birds appears generally browner in the upper parts and whiter in the under ones. Flocks of hundreds of Golden Plovers may then be met in association with similarly large ones of Lapwings in lowland fields and, in hard weather, on the coasts. The Golden Plovers join in the aerial exercises of the Lapwings, but may at once be distinguished from them by their smaller size, pointed wings, quick wing-stroke, and rapid wheelings, as well as by their liquid, whistling '*Flu-ee*.' Whether flying or on the ground, they hold themselves to some extent apart from the Lapwings, though in constant association with them.

GRAY PLOVER—12 inches. A coast-bird, principally of the eastern sides, undergoing seasonal changes in the colour of the plumage similar to those of the Golden Plover, but to be distinguished from that bird by the fact that the axillaries (*vide* Gray Plover) are at all times black, whilst those of the Golden Plover are white.

GRAY PLOVER. — Form, like Golden Plover (plate 103). 12 inches. Upper parts black, barred and spotted with white, becoming whiter towards the tail; tail white, barred with black; forehead, streak over eye, and large patch on side of breast white; face and under parts black, but white towards tail;

bill and legs black. In winter the black parts become dirty white. Winter migrant.

The Gray Plover whilst with us is essentially a shore-bird, procuring its food on the sand-banks and mud-flats exposed at low tide. It affects principally our eastern coasts, and is less seen in Ireland. Some birds remain throughout the winter, but it is chiefly at the times of the spring and autumn migrations that the bird is observed. Then they may be met in flocks of half-a-dozen to fifty or so running quickly along the tide-line, snapping up marine insects and the like. The notes are a long, melancholy whistle that may be written '*Köp*,' and a shorter call-note like the '*Tlu-ee*' of the Golden Plover. The wings are pointed, the wing-stroke rapid, and the flight quick, and while flying the birds affect geometrical formations, with frequent canting and wheeling.

GOLDEN PLOVER—11 inches. A breeder on British moors, similarly black on face and breast in the summer, and occurring on the coasts principally in winter and at the times of migration. Note and gestures practically indistinguishable from those of the Gray Plover; but the axillaries (that part of the wing nearest the body on the under side of the wing, i.e. the 'arm-pit') in the Gray Plover are at all times *black*, and in the Golden Plover *white*.

KENTISH PLOVER.—Form, like Ringed Plover (plate 104). $6\frac{1}{2}$ inches. Upper parts brown, and tail brown, except the outer feathers, which are white; forehead and eyebrow white; black strap over the crown; another from the base of the bill to the ears; white band round the throat; below this, a black

Plate 103.



GOLDEN PLOVER.



RINGED PLOVER.



patch at each side of the chest, but failing to meet in the front; bill and legs black. *Female*: lacks the black strap over the crown, and the chest-patches are ruddy-brown. Winter: the black strap on the face and the black chest-patches are lacking. Summer migrant.

Eggs.—3-4, dull yellowish stone-colour, finely spotted and scrawled all over with blackish-brown; $1.2 \times .9$ inch (plate 130).

Nest.—Merely a hollow in sand or shingle.

The Kentish Plover is a summer visitor, nesting on the shingly beaches of Kent and Sussex, and even as a migrant occurring in small numbers on the east coast only between these points and Lincolnshire. Thus, besides being a rarer bird, it is of a very limited range as compared with the Ringed Plover, which in other respects it closely resembles. It lays its eggs on the open shingle in the same manner; in its carriage, gestures, and piping note it is indistinguishable; it has similarly pointed wings and quick flight, the same runnings and tackings, the same habit of banding together after the breeding season, and of circling out to sea and back when disturbed; in short, the description of the Ringed Plover may well stand for the Kentish Plover also, and only attention to the markings of these birds can enable them to be distinguished one from the other.

RINGED PLOVER— $7\frac{1}{2}$ inches. The black breast-band is continuous, not broken in front as in the Kentish Plover; the bill and feet are orange, the former black-tipped, whilst the bill and feet in the Kentish Plover are black. The Ringed Plover is resident and migrant; the Kentish Plover is a summer visitor only.

RINGED PLOVER.—Plate 104. $7\frac{1}{2}$ inches. General colour above light brown; forehead white, a broad black strap passing over the crown from eye to eye; another passing over the bill from ear to ear; a broad white band round the throat, succeeded by a similar broad black one on the neck; remainder of under parts white; bill and legs orange, the former tipped with black. Resident.

Eggs.—4 (I have found 5), pear-shaped, pale stone or cream, finely spotted with detached round spots of dark brown and gray; 1.4×1.0 inch (plate 130).

Nest.—A depression among shingle or on bare sand, with a few pieces of broken shells for lining, situated usually a little above high-water mark.

The Ringed Plover is one of our commonest shore-birds. It is found throughout the United Kingdom, and nests also beside inland lochs. The nest is a slight circular depression in the shingle above high-water mark, and is usually lined with small stones and bits of shell. The clear, musically whistled '*Tu-tip!*' of the male gives warning of approach, and if the eye be run along high-water mark, the female will probably be seen scudding with lowered head down to the sand. There the birds run to and fro in long sweeps about the shore, calling, and at each pause standing to bob their heads in protest. If the eggs have been laid, they will betake themselves well ahead along-shore; if the young are out, the female keeps near, flying round with frequent piping, or running frantically to and fro, at times depressing her tail and

trailing her wings as she drags herself about the ground like a wounded bird. Before and after the breeding season Ringed Plovers mix with other shore species—Oyster-Catchers, Turnstones, Dunlins, &c. When put up, they circle out over the sea closely packed, shading now brown, now white, as they turn the upper or the under parts to view. When feeding they run beside the water, running forward or backward as it ebbs and flows. Probably because the Ringed Plover is also to some extent an inland breeder, it is met anywhere beside inland waters at times of migration.

KENTISH PLOVER— $6\frac{1}{2}$ inches. (Kent and Sussex coasts.)

The black straps on the crown and sides of face are similar to those of the Ringed Plover, but in place of the black collar there is a patch of black at each side of the chest, the two patches failing to meet in front to complete a collar; bill and legs black.

DOTTEREL.—Form, like Ringed Plover (plate 104). 9 inches. Ashy-brown above, with lighter edges to the feathers, and white tips to the tail-feathers; crown black, with a white margin all round, forming a very conspicuous eyebrow; face white; broad ashy-brown band on the chest; a narrower white band below it; breast and flanks bright chestnut; belly black, followed by white beneath the tail; bill and legs dusky. Summer migrant.

Eggs.—3, yellowish-olive, densely blotched with dark brown; 1.6×1.1 inch (plate 132).

Nest.—Merely a little mossy depression.

The Dotterel is a small Plover nesting on the

ground about the mountain-tops in the Lake District and in Scotland. It appears in the south-east of England in small bands towards the end of April, making its way northward across heaths, pastures, and ploughed lands, whence, after lingering some time, it passes to the high lands. At the nest its habits are precisely those of the better-known Ringed Plover, though the solitude of its breeding-haunts seems to have induced in the Dotterel a lack of wariness. Still, in the breeding season the male keeps his watch, piping his warning note when danger is near. Then the female bird sneaks from the nest, and running to some distance, rises to join the male in quick, circling flight about the intruder. Afterwards both descend near at hand, running wildly about, and standing to watch with bobbing heads, the female at times dragging herself along the ground with depressed tail and drooping wings like a wounded bird. In August the southward migration begins, the birds departing in the manner and by the way of their spring arrival. The Dotterel is rarely met on the seashore. The banded chest and chestnut breast are found in conjunction in no other running bird of the Dotterel's size and habits.

TURNSTONE.—Plate 105. 9 inches. Upper parts black and chestnut; lower back and rump white, latter crossed by a dark band; tail-feathers white at base, then black, and mostly tipped with white; wings black and chestnut, with white bars and patches; head and neck white, but streaked on

the crown and mottled on the nape, and with a heavy black pattern winding irregularly about face, neck, and upper breast; remainder of under parts white; bill black, rather long, and tapering to a sharp point; legs and feet orange-red. *Female*: duller. Spring and autumn migrant.

The Turnstone is a migrant on all our coasts, and sometimes inland, passing northwards in May, and appearing on its return southwards in July, at which season it loiters for some months, some birds remaining throughout the winter on the east of Scotland, in the south and west of England, and on the west coast of Ireland. It joins Ringed Plovers and Dunlins in their search for marine insects and small crustaceans, turning over with its bill the seaweed and stones in order to discover them. It is from this action that the bird has received its local name of Tangle-Picker, and its general one of Turnstone. The black markings about the face and fore-neck lack altogether the more or less rectangular simplicity of the black bands of the Ringed and Kentish Plovers, and the sharply defined black-and-white pattern exposed on back and wings and tail when the Turnstone takes wing makes it as striking as an Oyster-Catcher. There is no shore-bird of the running kind with plumage so boldly variegated save the Oyster-Catcher, a much larger bird. Further, the bill of the Oyster-Catcher is bright red, blunt, and twice as long as its head, whilst the Turnstone's bill is black, tapering, pointed, and equal to about three-quarters of the length of its head. No other shore-bird habitually turns over stones.

RED-NECKED PHALAROPE.—Plate 105. Length, $7\frac{1}{2}$ inches. *Female*: upper surface from brow to tail blackish-gray, with buffish streaks at the sides of the back, and white margins to the feathers from the lower back to the base of the tail; wings dark, with white cross-bar; chin white; bright-chestnut band on throat; ash-gray chest; remaining under parts white; bill thin, rather long, tapering to a point, black; legs and feet greenish. *Male*: smaller and duller. Summer migrant.

Eggs.—4, pale greenish-buff, spotted and heavily blotched with dark brown; $1.15 \times .82$ inch (plate 134).

Nest.—Merely a depression among grass or heather.

The Red-Necked Phalarope breeds in small numbers in the Orkneys and the Shetlands, as well as in the Outer Hebrides, but is more widely known in England and Scotland as a bird of passage, chiefly in autumn. Its feet are lobed like those of a Coot, and the bird may be met in flocks on the sea or upon some lake or pool, swimming with ceaseless tackings and with head drawn back like a tiny Gull, snapping to right and left as it takes a floating morsel of food from the surface, or dipping head and bill to bring up some small crustacean. Nevertheless, Phalaropes are quite at home on the land, running about to collect food on the margins of the waters they haunt. The nest is formed in the herbage near to water, be it sea, lake, or pool, the male bird incubating the eggs. When disturbed the bird utters a sharp '*Pleep!*' and is joined by the female, unless my lady has gone to air her finer feathers with other gadabouts on some distant pool. If

eggs be in the nest, the birds, though under observation, swim about or feed apparently with little concern. But any one who knows the Moorhen, and birds of the Plover and Snipe kinds, also knows that those particles of food snapped up under such conditions with such nervous haste and frequency are purely imaginary. If there be young, it is the male who rushes about crying with the solicitude which goes with his strangely inverted functions. Most of our shore running birds can swim if put to it, but none but Phalaropes do so habitually, and none have their lobed feet, a characteristic indicating swimming powers.

GRAY PHALAROPE—8 inches. A fairly regular autumn visitor in small numbers, though occasionally in very large ones, to the south-eastern shores of England, and to the Scotch coasts from Berwick to the Orkneys. A circumpolar breeder, with plumage largely chestnut in summer, it comes to us in its gray winter plumage, being at that time gray above, with a black nape; the wings dark, with a white wing-bar; forehead and under parts from chin to tail white; bill flat, rather wide; legs and feet olive.

PHEASANT.—37 inches. Head and neck green, with bronze and purple gloss; sides of head bright red; remainder of plumage of a generally brown colour, but highly variegated both as to the sub-tones of colour and the many minute markings that diversify it; long, pointed tail. *Female*: an altogether plainer, browner, and smaller bird, being 24 inches. Resident.

Eggs.—10–14, pale olive; 1.85×1.45 inch (plate 132).

Nest.—On the ground, among grass, or under a bramble or other low growth.

The Pheasant is usually to be seen in ploughed, stubble, and grass lands, between the clumps of covert where it breeds and roosts, only the rounded backs of the birds showing as they creep about feeding, their long tails trailing behind them. If the cock-bird looks up, there is no mistaking the dark neck and scarlet face. When alarmed the birds crouch among the grass or clods, worming their way along until they make a final dash for cover. If surprised well out in the open, they run swiftly with a grand gliding motion; but if put up, they rise with loud outcry, '*Orrk! orrk!*' and fly laboriously with violently whirring wings. Though the Pheasant is essentially a ground-bird, it perches on a branch of a tree to roost, its loud '*Orrk!*' resounding through the covert ere the bird settles down for the night. The eggs are placed on the ground in a hollow in low growth, and usually under shelter of hedgerow or bush. There is no other bird of the size of the Pheasant with its somewhat Peacock-like shape and long, pointed tail.

COMMON PARTRIDGE.—Plate 106. $12\frac{1}{2}$ inches. Head and nape grayish-brown; throat and fore-neck chestnut; upper parts brownish-buff, much obscured by a system of fine black cross-lines; breast gray, also finely lined with black; large chestnut horse-shoe patch on the lower breast of the male; flanks broadly banded with chestnut; remaining under parts whitish; legs horn-colour. Resident.



Eggs.—About 10–20, olive-brown; 1.45×1.15 inch (plate 132).

Nest.—Merely the depressed herbage among which the eggs are deposited.

This is the Gray Partridge of sport, a short-necked, full-bodied, stub-tailed bird, frequenting cultivated lands. The nest is a hollow in the herbage at the foot of a hedgerow, beside standing crops, or some similar simple shelter. The birds are usually seen in coveys of about half-a-dozen, or larger ones in winter, in ploughed, stubble, and grass lands, but creep about with lowered heads in so quiet a manner that they might easily be mistaken for inanimate objects. Indeed, their low, rounded backs and small, peeping heads give them the appearance of so many tortoises, and it is only when they rise with loudly whirring wings that they offer a better view. The flight is swift but heavy and dead-ahead, marked by skimming on arched wings as they come to earth. Towards dusk the peculiar creaky cry of the Partridge may be heard, a two-syllabled, speech-like utterance distantly resembling the cry of the Lapwing, the first syllable short, the second long and lower in pitch, and of a peevish, complaining quality. While delivering it the cock-bird stands bolt-upright in the open, and soon his companions are seen running out cautiously to join him; for all sleep together in the open.

RED-LEGGED PARTRIDGE—14 inches. Upper parts ruddy-ash; throat white, encircled by a black line; no horse-shoe patch on the breast; red-legged and red-billed. A bird of south-eastern England, inhabiting the drier and wilder tracts.

RED-LEGGED PARTRIDGE.—Form, like Common Partridge (plate 106). 14 inches. Upper parts ruddy-ash; a black circular line enclosing the white throat; below this black line a whitish margin, streaked with black; flanks broadly cross-banded with white, black, and chestnut; belly bright rufous; bill and legs red. Resident.

Eggs.—15–18, yellowish-white, suffused and minutely spotted all over with rusty-brown; 1.6×1.25 inch (plate 132).

Nest.—Merely a slight hollow in the ground.

The Red-Legged Partridge has been introduced and acclimatised in the south-eastern counties of England. It is a bird of wilder habit than the Common or Gray Partridge, frequenting drier and uncultivated lands. Being fleet of foot, it trusts to its running powers to effect escape. If forced to rise by imminent danger, it does so with a loud whirring of the wings, going dead-ahead in heavy flight, and skimming to earth again with hollowed, hanging wings when beyond range. The nest is a slight hollow scratched in the ground at the foot of a hedgerow or some similarly sheltered place. The birds feed in the open almost without motion, appearing like stationary objects as they creep about with lowered heads. The note is quite different from that of the Common Partridge, being a clear, musical piping.

COMMON PARTRIDGE— $12\frac{1}{2}$ inches; face, throat, and fore-neck chestnut; breast gray, with a large chestnut horse-shoe patch on the lower breast of the male; legs horn-colour. A grayer bird, frequenting cultivated lands.

QUAIL.—Form, like a tiny Partridge. 8 inches. General colour above light brown, sharply variegated with yellow and black; a series of parallel bands, alternately yellow and brown, along the head and nape; throat white; chest ruddy-buff, with lighter streaks; under parts white; bill dusky-brown; legs paler. Summer migrant and resident.

Eggs.—7–12, yellowish-white, very glossy, spotted and blotched boldly with umber-brown; $1.1 \times .9$ inch (plate 135).

Nest.—Merely a hollow scraped in the ground, with a scanty lining of dead stalks and stems.

The Quail is in form like a tiny Partridge, plump-bodied, small-billed, and having a stumpy tail. It is a summer migrant to this country, where it is broadly rather than numerous distributed. Some birds are found even in winter in the south of England and in Ireland. The Quail nests in a slight hollow scratched among corn or grass, and has a very distinctive three-syllabled call, first a long, whistled note, and then two shorter ones, the whole supposed to resemble an insistent '*Wet-my-feet!*' Quails are thorough ground-birds, feeding on grain, seeds, and insects, and trust to their running powers and aptitude for taking cover, rather than to flight. If flushed, they escape in low flight with whirring wings, the latter being drooped archwise as they finally skim to earth. They affect farm lands less than the wilder open country, and are less often seen than heard. The Quail is by far the smallest of our ground game-birds (about a quarter of

the size of a Partridge), and the brightest, leaving the impression of a yellowy-brown bird.

LAND-RAIL, or CORN-CRAKE.—Plate 107. Length, $10\frac{1}{2}$ inches. General colour above yellowish-brown, boldly streaked with dark brown; wings chestnut; under parts yellowish-white, with broad brown bands across the flanks; bill and feet pale brown. Summer migrant.

Eggs.—7–10, dingy-white, with a reddish tinge, spotted sparingly with orange-brown and gray; 1.45×1.1 inch (plate 131).

Nest.—A depression in the ground, scantily lined with bits of dead herbage.

The Corn-Crake or Land-Rail is widely distributed throughout the United Kingdom. It is a bird of the pasture lands, arriving in May, from which time until the nest is constructed the incessant '*Crake!*' may be heard by day and night. Although the head of the newly arrived bird may often be seen as it peeps over the short, early grass, little more of it is likely to be observed during the remainder of its stay. At times, however, the short-billed, ruddy-bodied, stub-tailed bird, in form somewhat like a slender Partridge, may be seen as it runs with lowered head, hugging the border of standing crops or slinking along the furrows in potato-fields. When the grass is cut it takes to the growing corn. The Corn-Crake flies only under compulsion, its running and hiding powers offering it a safer means of escape from all but the



LAND-RAIL (CORN-CRAKE).

most imminent danger. Though a few birds may occur together in the same field just after their arrival in spring, the Corn-Crake is of a solitary habit. A few birds are known to winter in Ireland, and fewer still in England.

PARTRIDGE— $12\frac{1}{2}$ inches. The only bird which, as a frequenter of cultivated and pasture lands, and because of its rounded form, short bill and tail, approximates to the Corn-Crake; but the latter, as a yellowish-ruddy bird, is wholly unlike the grayish-brown Partridge, which, moreover, freely frequents the open.

SPOTTED CRAKE.—Form, like the Land-Rail (plate 107). Length, 9 inches. Face and throat grayish; crown dark brown; upper parts olive-brown, with dark streaks and small white spots, the latter chiefly on the neck and towards the tail; breast brown, also spotted with white, and passing into gray on the belly; flanks barred with brown and white; bill yellowish, reddish at base; legs and feet yellowish-green. Resident and migrant.

Eggs.—8–10, olive-buff, spotted with dark reddish-brown; $1.3 \times .9$ inch (plate 135).

Nest.—Of flags, the central cup lined with fine grasses.

Distribution.—Found in some of the southern counties of England, and locally on the east side from Sussex to Northumberland; rarer on the east of Scotland, though less so at the autumn migration, at which time it occurs also in Ireland, where it is at all times very rare. In Wales it breeds in Breconshire.

Whilst in its form the Spotted Crake more nearly resembles the Land-Rail, in its nesting and feeding habits it follows the Water-Rail. The nest, made of flags and lined with grass, is usually built among reeds or sedges, and the bird rarely leaves cover. It is an even greater skulker than the Land and Water Rails, and though so strong in flight as to cross lofty mountains during migration, it will resort to any shift by running, dodging, or hiding under immediate danger, rather than rise. The Spotted Crake arrives in the south-east of England in March, spreading out widely, though in no great numbers, where undrained land affords it congenial cover, or making shift with such cover as is offered by the growth along a meadow stream or ditch. Here it obtains the diet of worms, slugs, and insects upon which, with some addition of vegetable matter, it subsists. The bird retires in October, though some are known to winter in the south-west of England.

WATER-RAIL— $11\frac{1}{2}$ inches; bill long and slender, whilst that of the Spotted Crake is short and stout.

LAND-RAIL— $10\frac{1}{2}$ inches; yellowish-brown instead of olive-brown above; throat white; wings chestnut; no white spotting; bill pale brown.

NOTE TO 'SHORTER-BILLED RUNNING BIRDS.'

LAPWING.—12 inches. Although a good runner upon occasion, described under 'BLACK-AND-WHITE BIRDS' because of its conspicuous markings in black and white. A moorland breeder, dark above and white below, with broad, black breast-band, rounded ends to wings, white at base of tail when flying, and thin, upward-curling crest. Cries '*Pee-wit!*' In great flocks in pastures and ploughed lands in winter; also on the seashore.

LONG-BILLED RUNNING BIRDS.

DUNLIN.—Plate 108. 8 inches. Upper parts brown—ruddy on crown and back—with black centres to the feathers; under parts white, with black streaks on neck and chest, and with a large black patch on the belly; bill and legs black. In winter ashy-gray above, and without the black belly-patch. Resident.

Eggs.—4, pear-shaped, greenish-white, spotted and blotched heavily with red-brown; $1.35 \times .95$ inch (plate 135).

Nest.—Generally a depressed tuft of grass, with a few bits of dead herbage for lining.

The Dunlin, as a breeding bird, nests on the ground on moorland, chiefly from Lancashire and Yorkshire northwards, and in some parts of Ireland. No doubt it is because of this that the bird appears fairly generally about inland waters and marshy spots at times of migration. In summer a few non-breeding birds are scattered along our coasts, and large flocks occur there in winter. But it is at the times of the spring and autumn migrations that the Dunlin becomes exceedingly numerous. At those seasons birds are met in flocks, with or without other small waders, ranging from half-a-dozen to several hundred birds. At high-water they stand back on the beach at rest; when it begins to ebb they dart about in quick-flying, closely

packed bands, flickering white as they cant in flight ; but when the sea uncovers the shore-flats they hang on its retreat, rushing about beside it with something of the fury of feeding Starlings as they pick the small life that forms their food from the sand or mud. If put up, they circle out over the sea, now lost to view as their dark upper parts are turned shorewards, now flashing broadly white as their under parts are exposed by all with beautiful regularity. The alarm-note is harsh, unlike the usual musical piping of birds of this kind. The black patch on the under parts of the Dunlin is distinctive in a bird of its size, only the much larger Golden Plover and the Gray Plover having a marking of this kind.

LITTLE STINT—6 inches. Like a diminutive Dunlin, with a rufous summer and an ashy-brown winter phase in its colouring, but at all times without the black belly-patch of the Dunlin. It visits the eastern shores of the British Islands in spring and autumn, chiefly at the latter season, and occurs principally on the south-eastern coasts of England. It is our smallest wading bird.

PURPLE SANDPIPER.—Form, like Common Sandpiper (plate 109). $8\frac{1}{2}$ inches. General colour above blackish, glossed with purple, blackest from lower back to tail; head and neck dull blackish; under parts white; bill brown; legs dull yellow. Winter migrant.

The Purple Sandpiper is known almost exclusively as a winter inhabitant of our coasts, resembling the



DUNLIN.

KNOT.



COMMON SANDPIPER.



Oyster-Catcher in its partiality for rugged, sea-washed rocks. Here, alone or in small parties, and close to the breaking waves, it runs about searching the seaweed for the marine insects, small crustaceans, &c. on which it feeds. Occasionally an odd bird joins the flocks of Dunlins and other small waders on the mud-flats; from these, however, it is easily distinguished by its plump form mounted on short legs, but chiefly by its very dark plumage, notably the black tract from rump to tail. Like the Turnstone, the Purple Sandpiper will swim on a calm sea. Its note is a piping '*Wheet-wheet!*'

KNOT.—Plate 108. 10 inches. Crown and upper parts mottled with brown, gray, and buff, becoming white, flushed strongly with chestnut, on the rump, with black bars before the tail; face and under parts chestnut; bill stout, straight, black; legs black. In winter ashy-gray above, but white, with blackish bars, towards the tail; under parts white, with dark streaks and mottling on fore-neck, chest, and flanks. Winter migrant.

The Knot visits our coasts as a migrant in spring and autumn, but in much greater numbers at the latter season, and many of the birds stay with us until spring. Singly or in small bands they frequent the seashore, often associating with Dunlins and Ringed Plovers on the flats, and flying and running with them along the water-line as the tide recedes. The Knot has a musical note, '*Twée-twée!*' used as it flies. The Dunlin, Curlew-Sandpiper, and Sander-

ling are the only birds with which, because of their somewhat similar changes of colour, the Knot may be confounded.

DUNLIN—8 inches; central tail-feathers longer than the others, whilst the tail of the Knot is square at the end; rump brown, but whitish, flushed with chestnut, in the Knot; form slighter in the Dunlin. In summer the Dunlin is infallibly recognised by its black stomach-patch.

CURLEW-SANDPIPER—8 inches; rump white at all times, and bill clearly curved downwards.

SANDERLING—8 inches. Lacks the white or whitish rump of the Knot.

SANDERLING.—Form, like the Knot (plate 108). 8 inches. Upper parts rufous, with black centres to the feathers; face, neck, and breast rufous-buff, with brown spots; remainder of under surface and sides of lower back white; bill rather stout, about equal in length to the head, blackish; legs blackish. Winter: light ashy-gray above, white below. Spring and autumn migrant.

The Sanderling is met on our coasts—frequenting the sandy portions rather than the mud-flats—as a migrant in his chestnut plumage from April to June, and in his gray-and-white winter coat from August onwards. The bird occurs also beside larger inland waters. If one could lay hold of him, the absence of a hind-toe would soon settle his identity. However, since he is a shore-bird, frequenting the flats in small flocks, often in the company of Dunlins and other small waders, flying and running with them along the water-line, and behaving generally as they behave,

it had better be noted that when a Sanderling is put up he rises with a single-syllabled '*Wick!*'

DUNLIN—8 inches; has a large black patch on the belly in summer; in winter the chest is clouded, not pure white as in the Sanderling. Note, '*Skree!*'

KNOT—10 inches. The rump is white in winter, and white, strongly flushed with chestnut, in summer. The rump in the Sanderling is ash-gray.

COMMON SANDPIPER, or SUMMER SNIPE.—

Plate 109. Length, 8 inches. Upper parts brown; a band of paler brown passing from the sides of the neck over the upper breast, the band being sharp-edged below, but vanishing imperceptibly above; fore-cheeks and under parts white; central tail-feathers brown, tipped with white; outer tail-feathers increasingly white from the inner to the outermost ones. Summer migrant.

Eggs.—4, pear-shaped, cream-yellow, spotted and lightly blotched with red-brown, and having pale-gray undermarkings; 1.45×1.0 inch (plate 135).

Nest.—A hollow, usually under cover of a tussock of grass, and lined with dry grass and bits of any other dead growth on the spot.

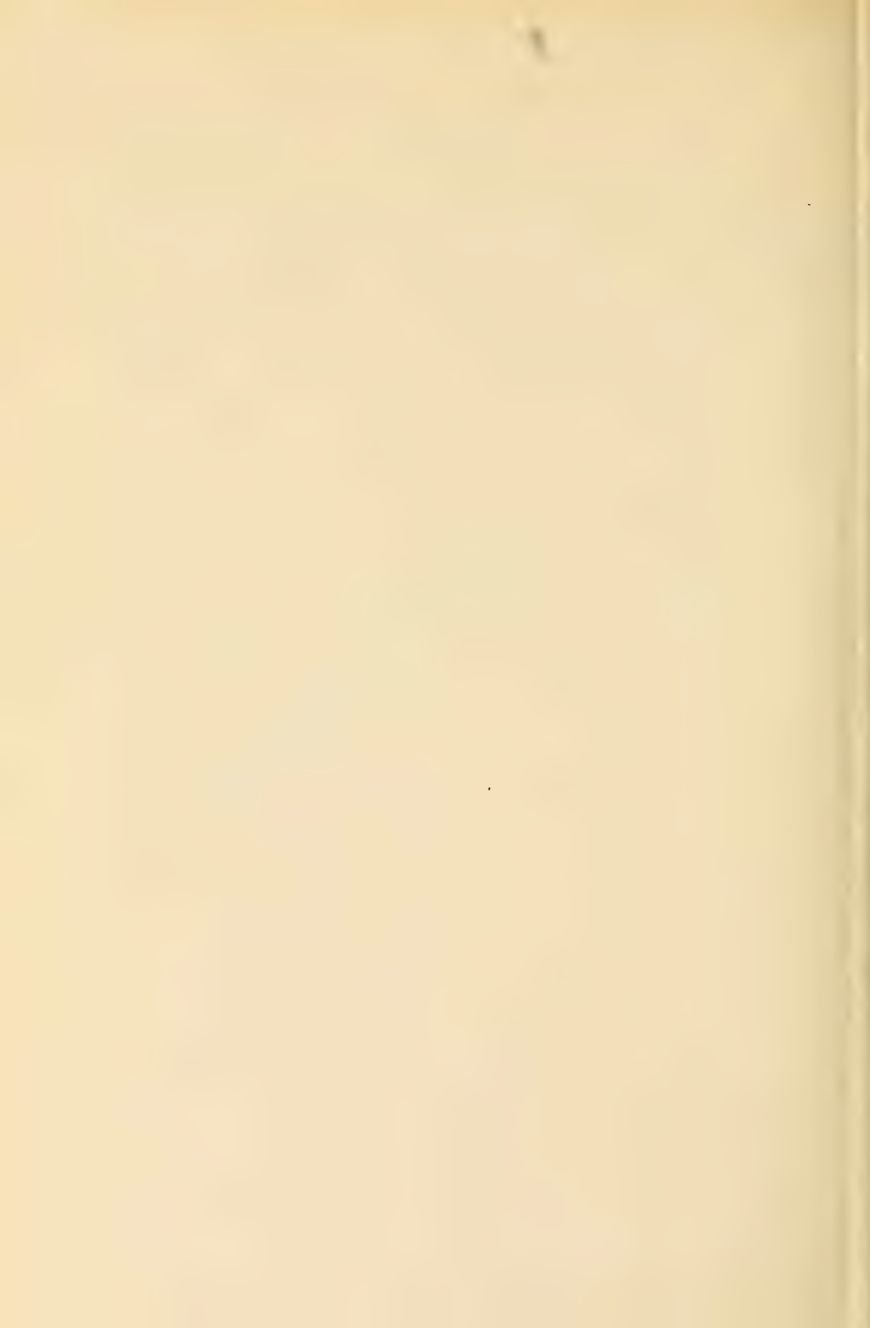
This bird passes in its northward migration in the spring, and again southwards in the autumn, some of the birds remaining to breed in all parts of the British Isles except the south-eastern counties of England. It may be encountered singly, in pairs, or in small flocks by river-sides, the margin of open waters, or on the tidal flats. When seen standing with closed wings, the bird shows conspicuously white on the

flanks and rump, the more so in the latter because the tail and hinder parts are ceaselessly wagged up and down. In fact, there is a most remarkable similarity in the gestures of the Common Sandpiper and the Wagtails, birds in other respects so different. Running hither and thither in the same lively way, both may often be seen procuring their food together by the water-side, now wading in the shallows, now snapping at some passing insect, short tail and long tail wagging with uniform motion. The Sandpiper emits a clear, piping '*Wheet!*' which, being at times repeated, runs up into a prolonged trill, and to this any others within earshot respond, following the first bird in flight, or signalling him to refuge. The flight, which is generally low, reveals long, pointed wings, beating quickly, or half-depressed during a skimming progress. Seen at such times from above, the bird shows all brown except a white wing-bar and the white outer tail-feathers; seen from the side, the lateral tail-coverts show plainly white; when the bird cants, showing its under parts, it is wholly white. As the bird alights, the wings, held aloft, flicker white ere they are closed. When the Sandpiper is disturbed in its breeding-haunts its cry is an anxious '*Pee-cep!*' No other small wader has the pronounced tail-wagging habit of the Common Sandpiper.

GREEN SANDPIPER.—Form, like Common Sandpiper (plate 109). $9\frac{1}{2}$ inches. General colour above brown; darker on lower back, rump, and wing; tail and the parts at the root of the tail white, with dark, irregular bars towards end of tail; under parts



GREENSHANK.



white, with dark streaks on face, neck, and breast; bill dull green, tipped black; legs dull green. Winter migrant.

The Green Sandpiper is observed usually in April and May, and from August onwards—most commonly in the month of August. It frequents the borders of inland waters and ponds, often singly, but sometimes in small parties. A favourite haunt is a narrow, deep-cut stream running through woodland. Here one may see it searching the borders, or standing stolidly in a shallow, quietly prodding the stream-bed with its long bill. The green of bill and legs is best seen at such a time, though in this country it is hard to come near the bird. When disturbed it rises quietly, but as it flies sends back a three-syllabled note, '*Tui-tui-tui!*' very like the note of the Common Sandpiper in pitch and delivery. On the wing it looks very dark above and very white below, whilst the white tract at the root of the tail, and the white tail itself, with its short, thick black bars at the end, are thrown up in strong contrast to the blackish-brown of the wings and back. This bird has the most peculiar habit for a Sandpiper of placing its eggs in old nests of other birds in trees, or sometimes in a squirrel's drey.

REDSHANK.—Form, like Greenshank (plate 110). 11 inches. General colour above light brown, with dark-brown streaks; lower back and rump white, with some black spots and bars near the tail; central tail-feathers pale brown, outer ones white, both with darker cross-bars; wings dark, except the central

flight-feathers, which are white; crown and nape brown; face and under parts white, streaked and barred with brown; bill, considerably longer than the head, black at the end, red at the base; legs and feet orange-red. Winter: ashy-brown above; white below. Resident.

Eggs.—4, straw-colour, spotted and blotched with dark reddish-brown and some gray; 1.75×1.2 inch (plate 132).

Nest.—In a tuft of rushes or grass, with some slight addition of dry grass-stems or bits of rush as lining.

The Redshank is generally distributed throughout the United Kingdom, both on the coasts and on inland marshes. Though a resident bird, it is met in greater numbers at the times of migration. It is at all times a sociable bird, nesting in small, loose communities among inland marsh growth, and on the salt-marshes above the tide. It is commonly present in small flocks on the shore-flats at ebb. Its note is a clear, melancholy '*Työ-työ-työ!*' and with this it notifies the approach of an even distant observer. The long legs help to carry off the long bill, and impart an elegance to the proportions of a Redshank not present in the smaller, more squat waders frequenting the shore. As it flies, the white rump, combined with the white tract on each wing formed by the middle series of flight-feathers, declares the Redshank. The birds fly in close formation, the wings, when not vibrated, being held much bent, giving them a hooked appearance. When changing their course Redshanks do not wheel, but change front with a common movement. When their nesting-haunts are

invaded, Redshanks fly about the intruder like upbraiding Lapwings, uttering a ceaselessly iterated '*Työp! työp!*'

GREENSHANK—14 inches. Very like the Redshank in general appearance, and in the length of leg and bill, but the last is slightly upturned, and the legs are olive-green. The Greenshank may be infallibly distinguished from the Redshank by the fact that the flight-feathers in the wings of the former are all dark.

GREENSHANK.—Plate 110. 14 inches. Upper darts gray, mottled with dark brown and white; lower back to tail white; wings dark; tail white, barred and spotted with brown, but clearer on the outer feathers; face and under parts white, with dark spots and streaks; bill, considerably longer than the head, dark brown; legs and feet olive-green. Winter migrant.

Eggs.—4, cream-colour, spotted and blotched with deep red-brown and some gray: 1.9×1.3 inch (plate 133).

Nest.—Sometimes in a tuft like a Redshank's; at others a depression in the ground among heather or grass, with a few bits of dry grass or heather for lining.

The Greenshank is known as a breeding bird in the north of Scotland, and in some of the islands west of it. In England it occurs at the spring and autumn migrations. At such times it feeds on the shore-flats or frequents the borders of inland waters, sometimes alone, sometimes in small parties. The slight upward curvature at the end of the bill has no doubt some connection with the bird's habit of pushing the

bill forward along the surface of the mud when feeding, a peculiarity it shares with the Avocet, another bird with upward-curving bill. Sometimes the Greenshank joins the Redshanks on the shore. It resembles these birds in using a similar three-syllabled note when disturbed, and, like them, has long legs and a bill considerably longer than the head.

REDSHANK—11 inches. This is the only common bird with which the Greenshank might be confounded, but the central flight-feathers, so conspicuously white in the wings of the Redshank during flight, are, like the rest of the flight-feathers, dark in the Greenshank.

WATER-RAIL.—Plate 111. Length, $11\frac{1}{2}$ inches. Upper parts olive-brown, heavily streaked with black; face, throat, and breast dark gray, barred with black and white on the flanks and abdomen; bill, long and slender, red; legs and feet pale brown. Resident.

Eggs.—7–11, creamy-white, lightly spotted with red-brown and pale gray; 1.4×1.0 inch (plate 133).

Nest.—Of leaves of reeds or sedges, placed among sedges or other coarse growth.

The Water-Rail is a bird of marshland cover, nesting among reeds and sedges in most parts of the United Kingdom offering suitable places. It is, however, such an inveterate skulker that it is rarely seen, preferring, when its haunts are invaded, to run and dodge through the reeds, for which its slim, compressed body is peculiarly fitted. If the bird by chance be seen, the simple markings—brown above, blotched black; breast dull gray; and flanks mottled





COMMON SNIPE.



broadly black and white—make it easy to identify, the long, slender, reddish bill and the stumpy tail placing it beyond doubt. It rises only when compelled, to flutter with dangling legs a short way ere dropping into the first available cover. Usually a silent bird, it becomes garrulous in the breeding season, uttering what has been defined as a loud, groaning '*Cro-o-o-an!*' besides a liquid '*Wheet!*' principally heard at evening.

MOORHEN—13 inches. Setting aside the Redshank, a bird quite distinct in form and habit, the Moorhen is the only other red-billed bird commonly frequenting marshy spots; but besides being considerably larger, it is of a generally blackish plumage, with white at the sides of the body and a white patch beneath the tail. The red bill, however, is short.

NOTE TO 'LONG-BILLED RUNNING BIRDS.'

OYSTER-CATCHER.—16 inches. A hump-backed, pointed-winged shore-bird, with bright-red legs and very long, straight, bright-red bill, using loud, piping note; a great runner at times, but because at all times boldly black and white, described under '*BLACK-AND-WHITE BIRDS.*'

SNIFE AND SNIFE-LIKE BIRDS.

COMMON SNIFE.—Plate 112. $10\frac{1}{2}$ inches. Crown of head barred lengthwise alternately buff and black, the outer buff stripes forming the eye-brows; sides of head whitish; chin white; upper parts mottled with black, rufous, and buff; neck and breast streaked brown; remaining under parts white, barred brown on the flanks; bill equal to a quarter of the entire length of the bird, straight, brown; legs olive-green. Resident.

Eggs.—Usually 4, greenish-white, spotted, blotched, and densely zoned with red-brown, purple-brown, and dark brown, having underlying markings of gray; 1.6×1.1 inch (plate 133).

Nest.—A depression among grass, heather, or rushes, with the usual scanty lining of bits of dead vegetation.

The Common Snipe breeds in marshy spots throughout the United Kingdom, and a great number of migrants arrive in the autumn. Spring is the only time when the Snipe voluntarily shows himself, careering round on high in great circles, from which at times he breaks aside tangentially, and during a short descent produces a quavering monotone synchronising with the quivering of the wings, and resembling the bleating of a distant goat. This may be heard at any time of day, but especially in the twilight. At other times the Common Snipe skulks,

usually alone, except at times of migration, among the marsh growth, probing the mud for worms. When approached he squats low, then springs up almost from before one's feet with a startled cry, and, with a peculiar rolling twist at the beginning of his flight, usually mounts high, and makes off altogether from a small marsh, or comes down at a distance on a larger one. Although able to run sharply enough if they like, Snipe and Woodcock have been separated from the 'Long-Billed Running Birds' because of their lethargic habit in this respect.

JACK SNIFE— $7\frac{1}{2}$ inches. Besides being a much smaller bird, lacks the buff band along the *middle* of the crown of the Common Snipe. A winter visitor from September to March, occurring in similar marshy places, but keeping more to cover. When flushed it rises silently, and with a fluttering flight drops into cover again at once.

WOODCOCK.—Plate 113. 14 inches. Upper plumage ruddy-brown, finely mottled with gray and black; chin whitish; all under parts brownish-white, with fine, dark cross-bars; bill slender, nearly twice as long as the head, dusky-brown; large eye, set far back, dark brown; feet grayish. Resident.

Eggs.—4, yellowish-white, spotted and splashed, principally at the larger end, with dark and light red-brown and pale gray; 1.75×1.3 inch (plate 133).

Nest.—Merely a depression in the ground, with addition of a few dead leaves.

The Woodcock breeds throughout the British Islands wherever suitable cover occurs, for he is, as his name declares, a bird of the woods. As his large eye might suggest, he is crepuscular in habit, and hides himself away during the daytime, often beneath some shadowy evergreen. If he be flushed at such a time, his peculiar glancing flight, of which the sudden twists and swerves are specially noticeable when he threads some woody glade, the finely mottled plumage, his large dark eye—in fact, everything but the utterly different form of the bird recalls the Nightjar, another bird of nocturnal habits. But the angular, laterally compressed head and elongated, always depressed bill are the Woodcock's own, and at dusk he hies away to the marsh to use the latter in probing the soft ooze for worms, his principal fare. Even then he will avoid the open, feeding preferably among the marsh growth. Nesting under woodland cover among dead leaves, he throws off his habitual silence and secrecy for a short time during the twilight at the opening and at the close of day, to parade before and serenade his mate. Flying to and fro with gravely flapping wings and pompously puffed plumage, he emits two notes, one deep, the other a high-pitched, whistled note. The female bird sits very close, and when the young are out, carries them, if need be, between her thighs to and from the feeding ground. As a great immigration of Woodcocks from the northern parts of the Continent takes place in October, it is probable that our own breeding birds shift southwards at that time. They are back in their places, however, sometimes with eggs out, when the Continental birds pass on their

Plate 113.



WOODCOCK.

return northwards in March. The Woodcock is solitary, joining others only, and probably casually, in migrating.

COMMON SNIPE—10½ inches. Though similar in form, much smaller; clear stripes, alternately buff and black, *along* the crown (the Woodcock is barred *across* the crown). Nests and feeds in the open in marshy places.

WHITE SEA-BIRDS.

COMMON TERN.—Plate 114. $14\frac{1}{4}$ inches. Capped with black to the level of the eyes; upper plumage pearl-gray, becoming white towards the tail; tail long, very finely and deeply forked; all other parts white; bill coral-red, tipped with black; legs and feet coral-red. Summer migrant.

Eggs.—3, greenish-gray or stone-buff, spotted and densely blotched with dark brown and gray; 1.7×1.1 inch (plate 133).

Nest.—A mere depression in sand, shingle, or turf, with or without a few bits of dry herbage.

The Common Tern is found along all the coasts of the British Islands, thinning out northwards until it intermingles with, and is finally superseded by, the more northerly ranging Arctic Tern. It is a summer migrant to our shores, placing its eggs either among the shingle on the mainland beach or on an island off-shore. On the wing no bird equals the Tern for elegance of form or grace of motion, the long, slender wings beating slowly with a suggestion of frailty, and the long and deeply forked tail recalling the bird's name of Sea-Swallow. The resemblance to the Swallow, however, lies in the forking of the tail alone. For the rest, the Tern looks like a very slim Gull, showing almost entirely white as it flies. But when it rests, its form expresses its function. It is a

natural dart, with long, pointed, spear-like bill; flat-crowned, and fashioned with low, smooth curves, short legs, and elongated extremities; and as one watches the bird flitting measuredly a few yards above the surface of the water, and sees it gather itself up suddenly and shoot like a bolt head foremost into the sea, one wonders if the dart-like Tern came to dive because so well fashioned to dive, or if by diving it has become so modified in form as to enter the water with the minimum of resistance. Its cry is a shrill, wavering screech, ear-splitting when a nesting colony is invaded, or when a throng of excited Terns are working over a shoal of fish.

ARCTIC TERN— $14\frac{1}{2}$ inches; under parts pearl-gray; no dark tip to bill, which is blood-red throughout.

ROSEATE TERN— $15\frac{1}{2}$ inches; under parts tinged with rose; bill black, orange at base; legs vermilion.

SANDWICH TERN—16 inches; bill and feet black.

LITTLE TERN— $8\frac{1}{2}$ inches. By much the smallest of our Terns; bill yellow; legs and feet bright orange.

All have the black cap, the gray upper and the more or less white under plumage, of Terns.

ARCTIC TERN.—Form, like Common Tern (plate 114). $14\frac{1}{2}$ inches. Head capped with black; upper plumage pearl-gray, becoming white on rump and tail; under parts pale pearl-gray; bill blood-red throughout; legs and feet coral-red. Summer migrant.

Eggs.—3 or 2, buffish or greenish-gray, lightly spotted with dark brown and gray; 1.6×1.25 inch (plate 134).

Nest.—A depression in sand, shingle, or scanty herbage, with or without a few bits of dead vegetation as lining.

Just as the Common Tern is more plentiful on our southern coasts, thinning out northwards, so the Arctic Tern preponderates about the Scotch shores, reaching its most southerly breeding station in the Farne Islands. In form, flight, and cry, in its habit of diving for fish, and in its breeding habits, it is for any but a practised eye and ear indistinguishable from the Common Tern. Attention must therefore be directed to the plain blood-red bill, lacking the black tip of the Common Tern, and to the under parts, which are of a pale pearl-gray resembling that of the back.

COMMON TERN—14½ inches; bill red, tipped black; legs coral-red; under parts white.

ROSEATE TERN—15½ inches; bill black, orange at base; legs vermilion; under parts tinged with rose-colour; white collar round hind-neck.

SANDWICH TERN—16 inches; bill and feet black.

LITTLE TERN—8½ inches. Our smallest Tern; bill yellow; legs and feet orange.

ROSEATE TERN.—Form, like Common Tern (plate 114). 15½ inches. Head capped with black; face, sides of neck, and a collar round the hind-neck white; back and wings delicate pearl-gray, paler on the rump and tail; outer feathers of tail white; under parts white, suffused with delicate pink; bill black, orange-red at base; legs and feet vermilion. Summer migrant.

Plate 114.



COMMON TERN.

LITTLE TERN.



HERRING GULL.

LESSER BLACK-BACKED GULL.



Eggs.—2-3, pale cream or buff, spotted and blotched with brown and gray; 1.7×1.15 inch (plate 134).

Nest.—A hollow in sand or shingle, usually on low rocky islands.

Although still lingering as a breeding bird in a few of its old haunts, the Roseate Tern is little known on our coasts. In its form, flight, and general appearance it resembles our other Terns, but there is a delicacy in the pearl-gray of the upper parts and a suffusion of rose-colour in the under parts which are distinctive of this bird, however elusive they may be in observation. More obvious points of difference are the white collar round the hind-neck, and the combination of a black bill, orange at the base, with vermilion legs and feet.

COMMON TERN— $14\frac{1}{2}$ inches; bill red, tipped black; legs red; under parts white.

ARCTIC TERN— $14\frac{1}{2}$ inches; bill plain red; legs and feet coral-red; under parts pale pearl-gray.

SANDWICH TERN—16 inches; bill and feet black.

LITTLE TERN— $8\frac{1}{2}$ inches; very much smaller; bill yellow, and legs and feet orange.

SANDWICH TERN.—Form, like Common Tern (plate 114). 16 inches. Head capped with black; upper plumage pearl-gray, but rump and tail white; face, sides of neck, collar round hind-neck, and under parts white; bill black, tipped yellow; legs and feet black. Summer migrant.

Eggs.—2, less often 3, cream to buff in the ground,

spotted and heavily blotched with brown and pale gray; 2.0×1.5 inches (plate 134).

Nest.—A hollow in the sand, with a few bits of dead grass for lining.

Like all our Terns, the Sandwich Tern is a summer visitor, its principal breeding station being the Farne Islands. It is scarcely to be distinguished from our other larger Terns unless the black bill and feet be noted, being in form and general appearance much as they, though the flight is rather more forceful, and one of its notes is likened by Seebohm to the syllables '*Skerr-rek.*' It has, besides, the scream more or less similar in all our Terns, the vowel-sound in which is *ee*, coupled with a strong *r*, the *rea* in the word scream well illustrating the combination. As usual with Terns, the Sandwich Tern nests in colonies of many birds, separately or in association with other species, placing its eggs in a hollow on shingle or in a gravel-lined hollow among low rocks.

COMMON TERN— $14\frac{1}{4}$ inches; bill red, tipped black; legs coral-red; under parts white.

ARCTIC TERN— $14\frac{1}{2}$ inches; bill plain blood-red; feet red; under parts pale pearl-gray.

ROSEATE TERN— $15\frac{1}{2}$ inches; bill black, orange at base; legs vermilion; white collar round hind-neck.

LITTLE TERN— $8\frac{1}{2}$ inches; our smallest Tern; bill yellow, tipped black; legs and feet orange.

LITTLE TERN.—Plate 114. $8\frac{1}{2}$ inches. Head capped with black, but forehead white; a black line

through the eye; upper parts and wings pearl-gray, but rump and tail white; face and under parts white; bill yellow, tipped with black; legs and feet orange. Summer migrant.

Eggs.—2-3, with dull surface, pale buffy stone-colour, spotted and blotched with brown and gray; $1.35 \times .95$ inch (plate 136).

Nest.—A depression among shingle just like that used as a nesting-place by the Ringed Plover, with which the Little Tern often associates in its breeding quarters.

The Little Tern is with us from May until early October, being widely, though not numerous, distributed around the coasts. It breeds in small communities, scarcely to be called colonies, placing its eggs in a slight hollow on shingly and sandy beaches above high-water mark. Although so much smaller than our other Terns, the Little Tern in its habits differs from them in no material way, unless it be in its rather livelier motions on the wing, a quality one comes naturally to associate with smallness of form. When the nesting grounds are invaded, the birds fly for some time about the intruder, repeating a short, sharp '*Quip!*' afterwards withdrawing until the ground is clear again. This bird has, besides, a thin, shrill scream of which the basal sound is *ee*, modified by a quickly rolled *r*. The Little Tern takes surface fish by diving from the air into the sea, as described under the Common Tern. There is no possibility of confounding this tiny Tern

with any other of our Terns, or with any other white sea-bird of our coasts.

KITTIWAKE.—Form, like Herring Gull (plate 115). $15\frac{1}{2}$ inches. Back and wings clear gray, the longest flight-feathers tipped with black; head, neck, and under parts, as well as rump and tail, white; bill greenish-yellow; legs and feet black. Winter: head and neck slaty-gray. Resident.

Eggs.—2–3, pale grayish or greenish-buff, spotted and blotched with brown and gray; 2.15×1.6 inches (plate 135).

Nest.—Of seaweed, lined with dry grass.

The Kittiwake is a resident cliff-breeder, sharing the steep, rocky headlands of our coasts with Guillemots, Razorbills, and other Gulls. It is the smallest of our indigenous Gulls, and of a more strictly maritime habit than most of them. The nest is a large, compact structure of seaweed, becoming quite columnar as it is added to from year to year. Where the birds are many the nests are necessarily placed close to one another; but when there is more space at command the Kittiwakes dot themselves about the cliff in loose association. From time to time they sail out in small flocks to circle round over the sea, or to fly up and down before the cliff-face ere returning to their nests. As they go they utter a cry quite unlike that of any other of our Gulls. It is peculiarly human in its expression, and may be written '*It-a-aye*,' closely resembling the words '*Get away*' as they might be pronounced by a sick or

Plate 116.



GANNET.



weary child, modulated with mournful prolongation of the final syllable.

COMMON GULL—18 inches; also gray in the upper and white in the remaining parts; but, though the bill is similarly yellow, the feet also are yellow, not black as in the Kittiwake.

HERRING GULL—23 inches; also gray in the upper and white in the remaining parts; but, though the bill is similarly yellow, the feet are flesh-colour.

BLACK-HEADED GULL—16 inches. In winter, when the head is white, with a dusky patch on the hind-crown, a dusky spot before the eye, and another and larger one behind the ear, the entire head and the neck of the Kittiwake are slate-gray. In summer, when the entire head of the Black-Headed Gull is black, the head of the Kittiwake is wholly white.

HERRING GULL.—Plate 115. 23 inches. Back and wings pearl-gray, but the longest flight-feathers blackish, tipped with black and white; head, neck, under parts, and tail white; bill yellow; legs and feet flesh-colour. *Young*: mottled and streaked all over with brown; tail barred with brown. Resident.

Eggs.—3, usually olive-brown, but at times green or buff, spotted and blotched with dark brown; 2.9×1.95 inches (plate 134).

Nest.—Of dead grass, fern-stalks, and the like, placed on the ground.

The Herring Gull breeds in colonies, often in company with Lesser Black-Backed Gulls, all round the coasts of the British Islands, placing its nest usually on rocky ledges at the cliff-head. When the nesting-site is invaded, the high-pitched, far-reaching '*He-oh!*' of the unmolested bird gives place to the deep-toned,

minatory '*Ha-ha-ha!*' with which it swoops at or sails up and down beside the intruder. The Herring Gull swoops to snap up its food in its bill from the surface of the sea, or wanders about the shore at the tide-line picking up small marine-life or the refuse of the tide; or, again, it may be found at times inland grubbing in ploughed lands.

COMMON GULL—18 inches. Breeds north of the Border. In the gray and the white parts like the Herring Gull, but much smaller; bill greenish-yellow, full yellow at tip; legs and feet greenish-yellow.

KITTIWAKE—15½ inches. In the gray and the white parts similar to Herring Gull, but much smaller; bill greenish-yellow; legs and feet black.

LESSER BLACK-BACKED GULL—22 inches; upper parts slaty-black; bill yellow, flecked with red at the bend; legs and feet yellow.

BLACK-HEADED GULL—16 inches; head blackish-brown all over; bill and legs red.

LESSER BLACK-BACKED GULL.—Plate 115. 22 inches. Upper parts and wings black, the longest flight-feathers having white spots near the tips; head, neck, and under parts, also rump and tail, white; bill yellow, splashed with red at the bend; legs and feet pale yellow. Winter: head and neck streaked with brown. *Young*: mottled brown and white; tail with dark band at the end. Resident.

Eggs.—3, variable, olive-brown, red-brown, or greenish stone-colour in the ground, spotted and blotched with dark brown, red-brown, and gray; 2·8 × 1·9 inches (plate 135).

Nest.—Of dry grass, seaweed, and stalks of herbage growing in the vicinity, placed on the ground.

The Lesser Black-Backed Gull is a breeder on rocky headlands and islands around our coasts, associating in large communities, sometimes unmixed, at others partly composed of Herring Gulls. Like the Herring Gull it places its nest on rocky ledges, takes its food with its bill during flight from the surface of the water, seeks it on the water-line at ebb, or when following the plough on inland fields. The ringing '*He-oh!*' and the solemn, menacing '*Ha-ha-ha!*' are indistinguishable from the cries of the Herring Gull. The Lesser Black-Backed Gull is at all times the easiest to identify because of the even black of the upper parts. The black of the back is said to vary greatly, even approaching the gray of the back of the Herring Gull; but there are plenty of a good black, and such nice distinctions may be left until later, when the observer will probably learn that light-backed birds are harder to find than to identify.

GREAT BLACK-BACKED GULL—30 inches; plumage as in the Lesser Black-Backed Gull, but a much larger bird, with legs and feet flesh-colour. It breeds on rock-stacks in Scotland, Ireland, and the west coast of England. Habits as Lesser Black-Backed Gull.

HERRING GULL—23 inches; upper parts gray; legs and feet flesh-colour.

GREAT BLACK-BACKED GULL.—Form, like the Lesser Black-Backed Gull (plate 115). Length, 30 inches. Plumage white; mantle slaty-black; wing-feathers tipped with white; bill yellow, reddish at the angle; legs and feet flesh-colour. Resident.

Eggs.—2-3, olive-buff, spotted and blotched with brown and gray ; 3.0×2.1 inches (plate 135).

Nest.—Of dry grass, seaweed, and stalks of weeds growing near, placed on the ground.

Distribution.—As a breeding bird in Dorsetshire, Lundy Island, Cornwall, Scilly, Wales, Isle of Man, the Lake District, and Solway 'flows ;' more numerous in north-west Scotland, Outer Hebrides, and north-west Ireland. As a visitor at all times round our coasts.

The Great Black-Backed Gull is in appearance a magnified Lesser Black-Backed Gull. It is far less numerous, and by reason of its greater size, slow, flapping flight, and deeper note, easily distinguished from the smaller bird, the only one with which, because of its similar coloration, it could possibly be confounded. It is a cliff-breeder, affecting rocky coasts and islands ; and the predaceous, carrion-eating propensities of the Lesser Black-Back are accentuated in its larger kinsman. It may also be found on hill-tops and on islets in mountain lakes.

COMMON GULL.—Form, like Herring Gull (plate 115). 18 inches. Back and wings pearl-gray, but the longest flight-feathers blackish, tipped with white ; head, neck, rump, tail, and under parts white ; bill greenish-yellow, tipped full yellow ; legs and feet greenish-yellow. Winter : the head and neck are streaked with brown, and the legs and feet are pale brown. *Young* : head, neck, and under parts mottled with pale brown ; tail with black band at end. Resident.

Plate 117.



FULMAR.



GREAT SKUA.



Eggs.—3, olive-brown or greenish-buff, spotted and blotched with brown and gray ; 2.25×1.5 inches (plate 136).

Nest.—Of grass, seaweed, and stalks of weeds growing near, placed on the ground.

The Common Gull breeds largely in Scotland, both on the coasts and on inland lochs, to a small extent in Ireland, and not at all in England, where, however, it is common enough out of the breeding season. It is gregarious, and the nests, formed of seaweed or dry herbage, are placed on ledges on cliffs, or on some lower rock. The bird swims buoyantly, and its food is taken on sand-bank or mud-flat, snatched up with the bill from the surface of the water as it dips in flight, or gathered in inland fields as it follows in the furrows behind the plough.

HERRING GULL—23 inches ; bill yellow ; legs and feet flesh-colour ; very similar in the gray and white parts to the Common Gull, but much larger.

KITTIWAKE— $15\frac{1}{2}$ inches. In the gray and white parts similar to the Common Gull, but bill greenish-yellow, and legs black.

LESSER BLACK-BACKED GULL—22 inches ; bill yellow, touched with red at the bend ; legs and feet yellow ; upper parts slaty-black ; remainder white.

BLACK-HEADED GULL—16 inches ; head blackish-brown all over ; bill, legs, and feet red.

BLACK-HEADED GULL.—16 inches. Upper parts and wings pearl-gray, but longest flight-feathers white, edged and tipped with black ; entire head blackish-brown ; neck and under parts, as well as rump and tail, white ; bill, legs, and feet red. Winter :

head white, with dusky patch on hind-part of crown, and another behind the ears. *Young*: of a general mottled brown, with dark band at end of tail; bill dull yellow, blackish at the bend; legs and feet reddish-yellow. Resident.

Eggs.—3, rarely 4, greenish-buff to olive-brown, spotted and blotched with dark brown, red-brown, and gray; 2.2×1.5 inches (plate 136).

Nest.—Of flags, sedges, reeds, and rushes, and placed among clumps and tussocks of any of these.

This is a species which breeds on suitable inland waters throughout the British Isles, affecting islands in lakes, or boggy tracts not easily accessible by land. In such spots the birds nest in large communities, the nests being placed close together on the ground among reeds and similar cover. As a consequence the Black-Headed Gull is well known even in summer in the fields of the surrounding country. Out of the breeding season it may be found following the plough, grubbing fields, and almost anywhere where water is. It is unmistakable so long as it has the nuptial black head, and even when in winter this is absent, the dusky patch behind the ear, marking the place where the edge of the black hood ran in summer, is easily observed with a glass; and the red bill and feet afford further assistance in identification. The usual cry of this bird is a sound resembling 'Kak!' It has, besides, a loud, guttural 'Mrā-oo!' and other guttural sounds delivered in the form of laughter, which sounds have earned for it the name *Ridibundus*. The Black-Headed Gull becomes increasingly common on the seashores from July onwards, when it may be

met seeking food on the tide-line, or snatching floating morsels from the surface of the sea as it flies. Like all Gulls it swims buoyantly.

TERNs.—The black head of a Tern is merely a cap covering the top of the head down to the level of the eyes, and extending along the nape for a short distance, the bird being white on face and throat, whilst the black head of a Black-Headed Gull is black all round, covering face and throat also. The tail is not forked as in Terns.

KITTIWAKE— $15\frac{1}{2}$ inches. In the winter, when the Black-Headed Gull loses its black head, the Kittiwake puts on a slate-gray hood; in summer the head is pure white.

COMMON GULL—18 inches; upper parts gray; bill and feet greenish-yellow, the latter in winter pale brown.

GANNET.—Plate 116. 33 inches. Adult entirely white except the head and neck, which are tinged with buff, and the longest wing-feathers and the bare patch about the eyes, which are black; bill large, straight, pointed, greenish-gray; legs and feet dark. Young birds are dark, finely speckled all over with white. Resident.

Egg.—1, chalk-white, with a blue sub-surface; 3.25×1.9 inches (plate 135).

Nest.—A pile of seaweed and grass, placed on cliff-ledges and rock-stacks.

The Gannet is a cliff-breeder in great numbers on the west coast of Scotland and England, and on parts of the Irish coast, but goes south in the autumn. It is our largest white sea-bird, and may be at once identified when ashore by the simple markings described above. When not standing inertly on the cliffs of its breeding station, it spends its time diving

into the sea for surface-swimming fish. When seen at some distance on the wing, it will seem a wholly white bird, with long tail, and long, sharply pointed wings black at the ends. At such times it flies usually about twenty feet above the surface of the sea, holding its own with slowly beating wings against any ordinary wind. Upon espying fish it expends the remaining momentum of flight in a sort of aerial leap, and then descends head foremost with closed wings, splashing into the sea. It reappears almost at once, tossing the fish down its throat as it rises. Though it affects the coast at all times, it may be met far out to sea, in which situation it will often bear down upon a vessel in high, swinging flight, retiring after a close inspection. At other times the bird will skim the waves of a heavy sea with alternate flapping and floating, heading a wind that sends the Gulls to shore. *There is no other white British bird of the sea of the Gannet's size*, and among the Gulls—birds which, though smaller, are largely white—there is none but has the upper surface of the wings gray, or black, or otherwise coloured. There is, therefore, no bird with which the Gannet can be confounded.

FULMAR.—Plate 117. 19 inches. Head, neck, and under parts white; back, tail, and wings light gray, except the longer flight-feathers, which are dusky; bill, hooked at end, yellow; legs and feet gray. Resident and winter migrant.

Egg.—1, granular in the surface, white, sometimes

having a few small reddish-brown spots; 2.9×1.9 inches (plate 134).

Nest.—On ledges and in crevices of cliffs where earth or grass occurs, little or nothing being added.

The Fulmar is the largest Petrel breeding in the British Islands. It comes in from its winter wanderings over the ocean in May to scratch a hole in the turfy crown above the rocks of St Kilda, the only breeding station of this bird in our country, and there it deposits its one egg and rears its young one. In a few months it takes again to the sea, roving far from land, and is little seen save from ocean-going vessels, especially whalers and sealers, until it returns again to its rocky haunt in the following spring. In appearance it is like a gray-backed Gull, but the flight, marked by alternate beating of the wings and a gliding on outstretched pinions, resembles that of the Shearwaters. Like Gulls it follows in the wake of vessels, beating from side to side over the track in a zigzag course, but hugging the waves much more closely than is the habit of Gulls. It may be seen, alone or in small flocks, in mid-ocean, where no Gull is to be looked for. It swims like a Gull.

SKUAS.

GREAT SKUA.—Plate 118. 21 inches. Upper parts dark brown, mottled with rufous and dull white; under parts rufous-brown; bill (hooked at end), and legs and feet (the latter webbed), black; central tail-feathers extending half an inch beyond the others. Resident and winter migrant.

Eggs.—2, variable, pale to dark brownish-buff, olive-brown, or olive-green, with spots and blotches of red-brown or dark brown and underlying markings of gray; 2.8×2 inches (plate 136).

Nest.—Of dry grass, heather, and moss, placed on the ground.

The Great Skua is all but extinct in our confines as a breeding bird, lingering only in two spots in the Shetlands, whither it returns each spring. In appearance it is like a mixture of Gull and Raven—a thick-set, hook-billed, web-footed, dark-feathered bird, with rounded tail and pointed wings. Few, probably, will see the Skua in its breeding haunts, and not many elsewhere. But if at sea a solitary, dark, crow-like bird bears down on a vessel in straight, strong flight at a height of about fifty feet above the surface of the sea, and, having overhauled it, swings above for a few moments to inspect its surroundings abeam and astern, then, with the abrupt, official air with which he came, passes off on a similarly high, straight line with quickly beating, pointed wings—that is a Skua.

You may have caught a fawny glint on the hind-neck in the sunlight, or a glimpse of some white on the upper surface of the wings, but what you cannot fail to have noted as the bird swung above was the large light tract formed by the white bases of the largest wing-feathers on the otherwise dark under sides of the wings. If he comes upon a body of Gulls, they rise at once in fear; if he gives chase to one of them, it will disgorge for fear the fish it had swallowed. The Skua himself may dash down upon surface-swimming fish in the manner of Gulls; but as a rule he prefers to rob rather than to work. He is a pirate, with all the insolence, but also with all the daring and the sea-roving instincts, of his kind. The nest is made on the ground in high moorland country.

RICHARDSON'S SKUA—20 inches; either entirely sooty-brown, or dark on crown and upper parts, with cheeks, neck, and under parts white, and the sides of neck tinged with yellow; but in either case the two central tail-feathers extend 3 inches beyond the others.

RICHARDSON'S SKUA.—Form, like Great Skua (plate 118). 20 inches, this measurement including the central-tail feathers, which extend 3 inches beyond the others. Upper parts slaty-brown; lighter on the hind-neck and back, but darker on the crown (where it forms a cap), the wings, and the tail; under parts white, the white tinged with yellow where it extends round the sides of the neck to form an incomplete collar, and shaded with ashy-brown on the sides of the breast and of the body; bill horn-colour;

legs bluish ; toes black. Resident and winter migrant.

Eggs.—2, brownish-green, spotted and blotched with brown, brownish-gray, and gray ; $2\cdot4 \times 1\cdot6$ inches (plate 136).

Nest.—A hollow in the ground, with a little dead grass or moss for lining.

Richardson's Skua is known as a breeding bird in the Shetlands and Orkneys, and in Sutherland, and on migration on the Scotch coasts and the east coast of England. It is smaller than the Great Skua, measuring seventeen inches against twenty-one after making allowance for the greater length of the central tail-feathers in the smaller bird. As a moorland breeder it differs from the Great Skua, the eggs being placed in a hollow in the ground. When inland the birds prey on small mammals and birds and eggs ; and when, after the breeding season, they take to the sea, they follow the piratical methods of the Great Skua, harrying Gulls and Terns and Petrels to make them yield up any fish or other food they may have taken. There is a variety of this Skua that is entirely dark, and in some parts the light and dark birds pair, there being no other difference between them.

GREAT SKUA—21 inches ; mottled brown above, rufous-brown below ; only slight elongation of the central tail-feathers.

Plate 119.



JAY.





BIRDS WHICH DO NOT FALL INTO GROUPS.

JAY.—Plate 119. Length, 14 inches. Body above and below cinnamon, but white on the chin and about the insertion of the tail; crest whitish, streaked with black; moustache, tail, and wings black, but with a brilliant patch spotted black, blue, and white at the bend of the wings, and a white patch in the centre of them; bill dark. Resident.

Eggs.—5-6, pale gray-green, closely freckled all over with pale brown, which forms a zone about the larger end, a few fine, sharp black streaks occurring in the zone; $1\cdot2 \times \cdot9$ inch (plate 136).

Nest.—Of twigs, lined with root-fibres and grass, placed usually moderately high in a tree, but sometimes in a thick bush.

Distribution.—Fairly general throughout England and Wales, and local in Scotland and Ireland, in the former as far north as Inverness-shire, and in Ireland in the south and east.

The Jay is the most brilliantly coloured of our larger woodland birds, as conspicuous as a Magpie when it flies to cover—a big, ruddy bird, black-winged and black-tailed, with tracts of white before, behind, and in the middle. The tail, though ample, is shorter, and the flight therefore freer, than the Magpie's; when the bird alights the tail is shot up

and fanned, and the wings opened and clapped-to, as in the case of the Magpie. Restless, excitable, vociferous, the Jay outdoes even the Magpie in these respects. Like the latter, it grubs the ground, takes toll of fruit and berry trees, eats eggs, and upon occasion will strip and pick a field-mouse. Thus it may be met almost anywhere in wooded country, though seldom far from cover. It has a rasping shriek as sudden and loud as the yell of the Green Woodpecker, and a lower note in which it soliloquises as with suppressed excitement when intruders are about. In its brilliant and bold colouring it is quite unique among birds of its size, and for purposes of identification this feature alone suffices.

GOLDFINCH.—Plate 120. Length, $5\frac{1}{4}$ inches. Crown and band descending from hind-crown to shoulder, black; space between bill and eye also black; forehead and throat crimson; back light brown; sides of head and under parts white, the breast tinged with buffy-brown; wings black, conspicuously patched with bright yellow and white; tail also black, the feathers tipped with white; bill whitish, tipped black. Resident.

Eggs.—4-5, bluish-white, spotted sparingly with pale purplish-brown, and having a few dark-brown spots and short streaks at the larger end; $\cdot66 \times \cdot5$ inch (plate 135).

Nest.—Very compact, like that of the Chaffinch, and composed of moss, grass, and wool, lined with seed-down, hair, and feathers, and placed usually in orchard trees, but sometimes in hedges.

Distribution.—Throughout England in suitable spots; widely but locally distributed in Ireland; in Scotland even more local, occurring chiefly in the south.

Largely migratory, but also to some extent resident, the Goldfinch nests chiefly in gardens and orchards, sometimes, however, placing its nest well out upon a branch of oak or beech growing in the open country. The song and call are the twitter and chirp of the Finch tribe generally, and in order to identify the Goldfinch one must look to the colours. These, and the scheme of their distribution, are so distinctive as to make it impossible to bracket this bird with any other than the Jay, and that for the sole reason that the Jay, like the Goldfinch, possesses no very obvious feature in common with any other bird. Both are, popularly regarded, odd birds. However, any difficulty arising from this cause is obviated by the illustration of the Goldfinch. These birds band together in the autumn and roam the open country, being drawn to waste lands by the thistles growing there, the seeds of which form a favourite item of their diet at that time. The brilliant crimson in the face and the bright yellow in the wings of the Goldfinch mark it off from every other British bird.

WHITE WAGTAIL.—Form, like Pied Wagtail (plate 11). Length, $7\frac{1}{2}$ inches. Crown, nape, chin, and gorget black; forehead, sides of face, break in gorget, and under parts white; back even gray; wings dusky-brown, with broad white edges to the

feathers ; tail black, with outer feathers white ; bill and legs black. Spring migrant.

Eggs.—5-7, usually not to be distinguished from those of the closely allied Pied Wagtail either in size, colour, or markings.

Nest.—Like that of the Pied Wagtail, and placed in similar situations.

The White Wagtail, a Continental form of our common Pied Wagtail, occurs with us as a bird of passage in spring and autumn. It is known to have nested occasionally in this country, having even paired with the Pied species, for which it is probably often mistaken. Indeed, in form, gestures, habits, and the general correspondence in the markings, these birds could scarcely be distinguished, were it not for the permanent even-gray back of the White species, and the broader white margins to some of the wing-feathers. In the Pied form the back of the male, female, and young after the autumn moult is also gray. In spring the back of the male Pied Wagtail turns black, so that at that time head, nape, and back are uniformly black. The back of the female, however, does not turn black in spring, but the gray, itself of a somewhat dingy cast, is irregularly smudged with black. Spring therefore is the time when the White Wagtail may be more easily distinguished from the Pied species, for at all times of the year, in male or female, the back of the White Wagtail is of a pure, even gray.



- | | | | |
|------------------|------------------|--------------|---------------|
| 1. Raven. | 4. Carrion Crow. | 7. Rook. | 9. Jackdaw. |
| 2. Pied Wagtail. | 5. Magpie. | 8. Starling. | 10. Blackbird |
| 3. Hooded Crow. | 6. Chough. | | |



1. Cormorant.
2. Pied Flycatcher.
3. Shag.

4. Lapwing.
5. Dipper.
6. Coot.

7. Moorhen.
8. Ring-Ouzel.
9. Oyster-Catcher.

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F

G



A1. Nightingale.
A2. Common Whitethroat.
A3. Lesser Whitethroat.
B1. Garden-Warbler.
B2. Chiff-Chaff.
B3. Willow-Wren.
C1. Wood-Wren.

C2. Reed-Warbler.
C3. Sedge-Warbler.
D1. Missel-Thrush.
D2. Song-Thrush.
E1. Skylark.
E2. Grasshopper-Warbler.

E3. Corn-Bunting.
F1. Hedge-Sparrow.
F2. Crested Tit.
F3. House-Sparrow.
G1. Spotted Flycatcher.
G2. Twite.
G3. Tree-Sparrow.

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A1. Meadow-Pipit.

A2. Tree-Pipit.

A3. Rock-Pipit.

B1. Woodlark.

B2. Redstart.

B3. Redbreast.

C1. Whinchat.

C2. Wryneck.

C3. Wheatear.

D1. Red-Ecked Shrike.

D2. Stonechat.

D3. Hawfinch.

E1. Bearded Tit.

E2. Cuckoo.

E3. Linnet.

F1. Lesser Redpoll.

F2. Chaffinch.

F3. Long-Tailed Tit.

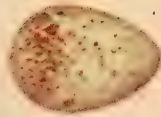


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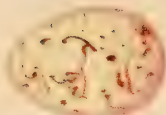
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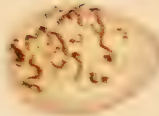
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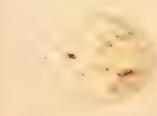
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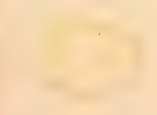
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D



E



A1. Gray Wagtail.
A2. Yellow Wagtail.
A3. Greenfinch.
B1. Siskin.
B2. Yellowhammer.

B3. Blue Tit.
C1. Great Tit.
C2. Cirl-Bunting.
C3. Sand-Martin.
D1. Common Wren.

D2. Kingfisher.
D3. Dartford Warbler.
E1. Golden-Crested Wren.

E2. Swirl.
E3. Tree-Creeper.
F1. House-Martin.
F2. Nuthatch.
F3. Swallow.





1. Lesser Spotted Woodpecker.
2. White-Tailed Eagle.
3. Golden Eagle.

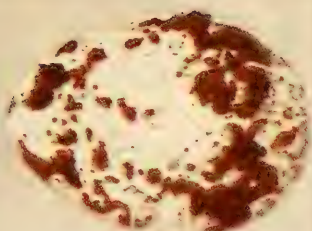
4. Common Buzzard.
5. Green Woodpecker.
6. Great Spotted Woodpecker.

7. Kite.
8. Osprey.
9 & 10. Cuckoo.



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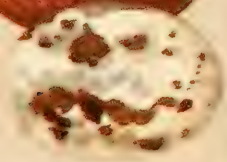


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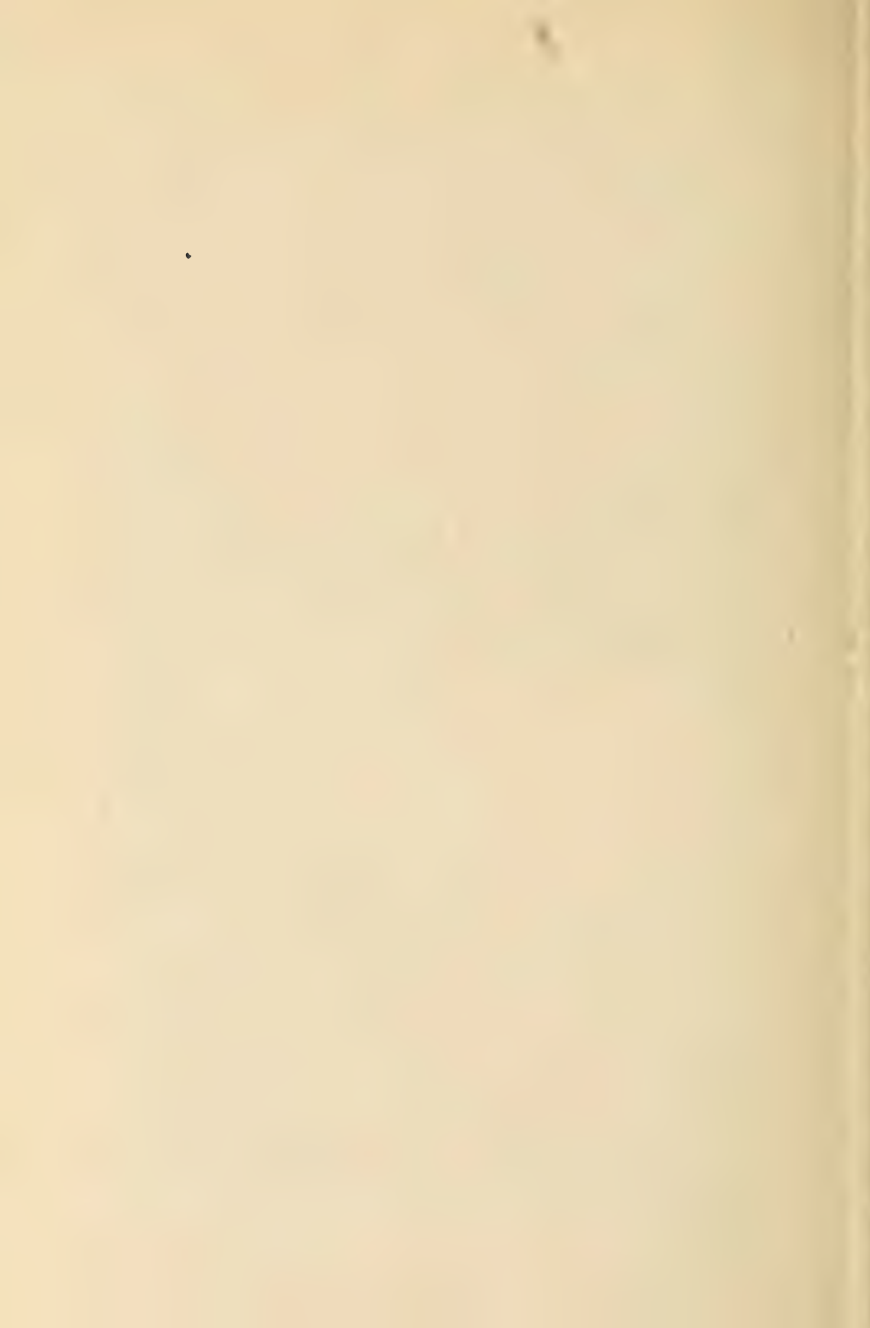
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1. Kestrel.
2. Sparrow-Hawk.
3. Peregrine Falcon.

4. Hobby.
5. Tawny Owl.
6. Hen-Harrier.

7. Merlin.
8. Montagu's Harrier.
9. Nightjar.



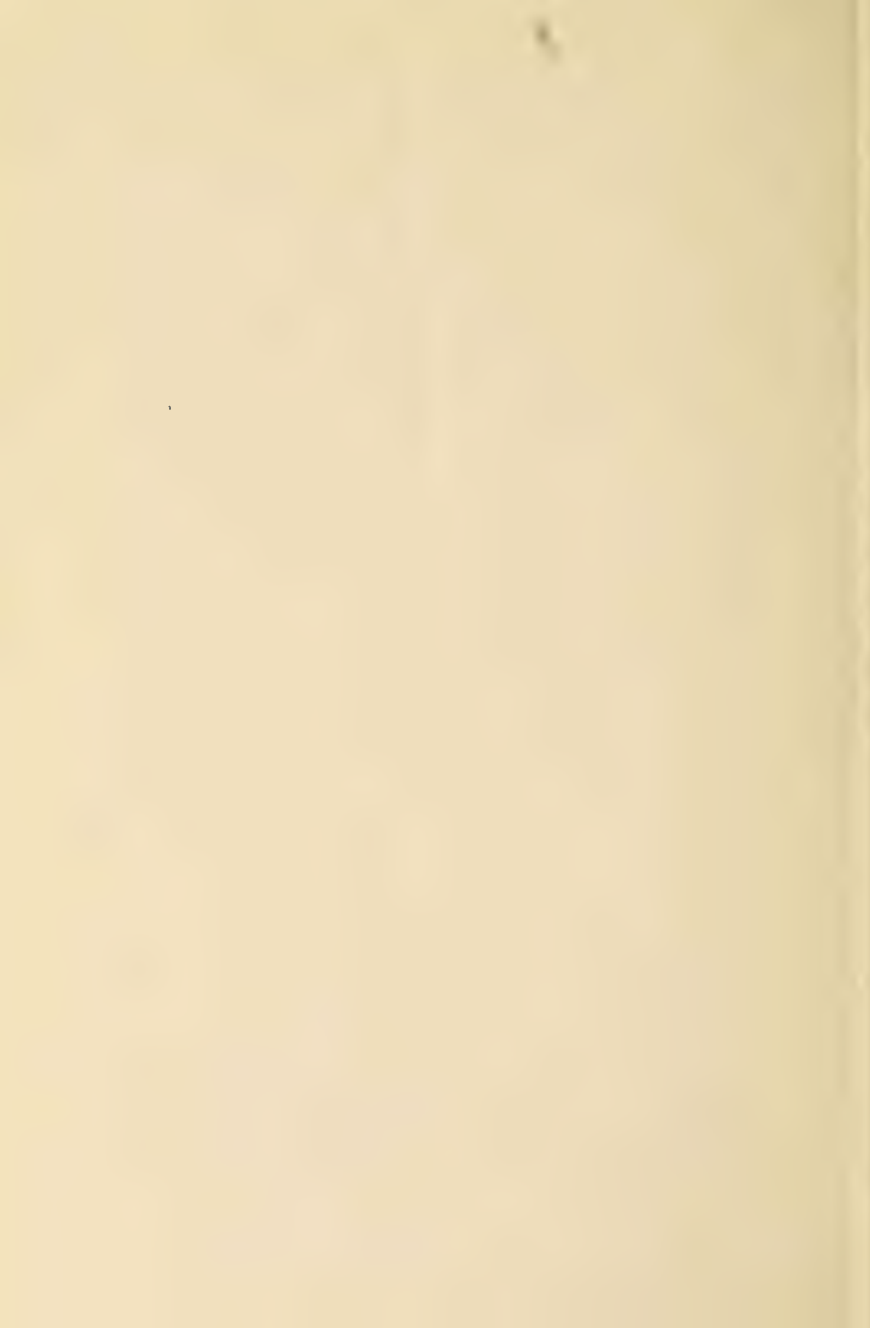


1. Long-Eared Owl.
2. Turtle-Dove.

3. Red Grouse.
4. Curlew.

5. Barn-Owl.
6. Ring-Dove.

7. Heron.
8. Black Grouse.



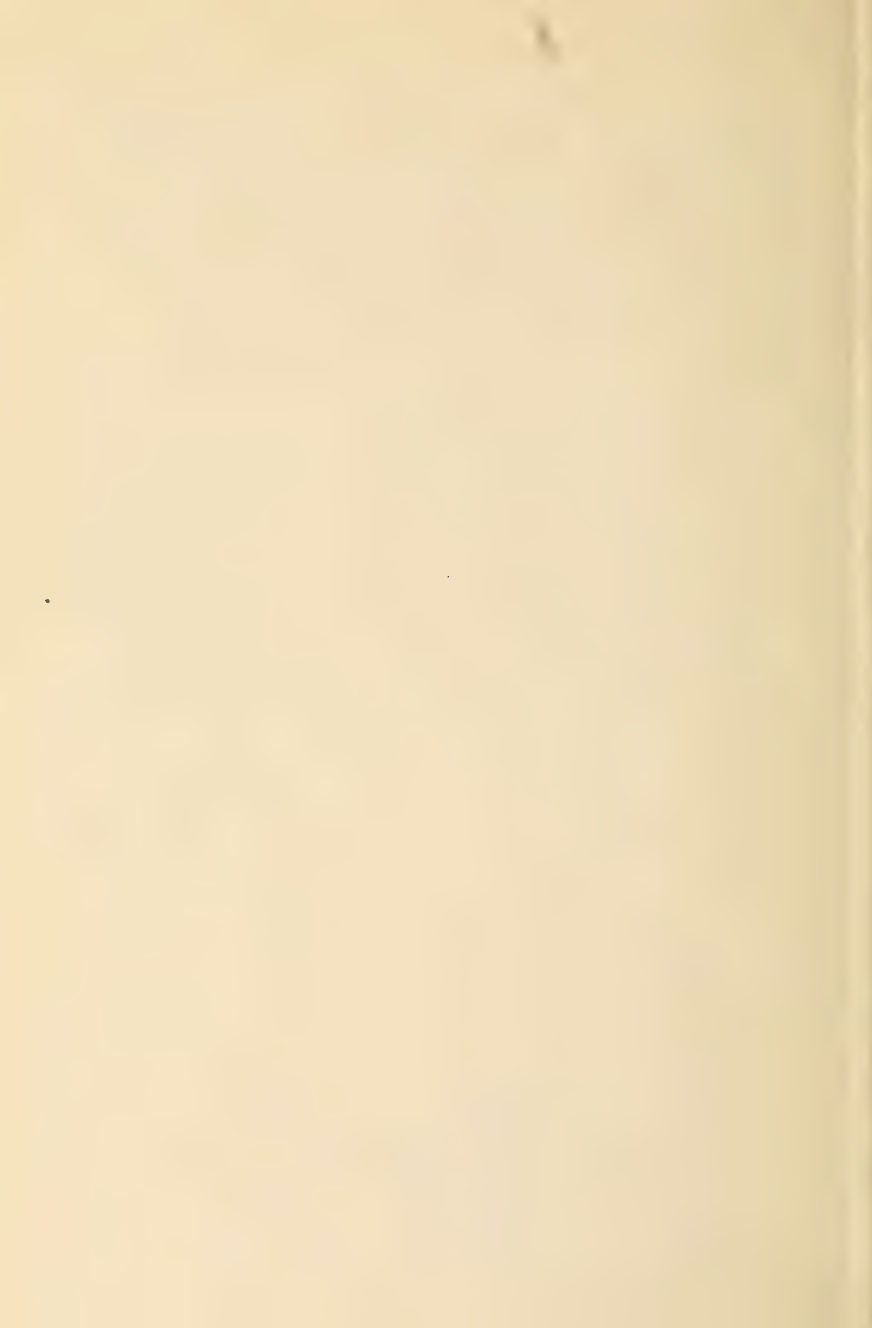


1. Mute Swan.
2. Gray Lag-Goose.

3. Sheldrake.
4. Pintail.

5. Ptarmigan.
6. Kentish Plover.

7. Wigeon.
8. Ringed Plover.





1. Black-Throated Diver.
2. Eider Duck.
3. Red-Throated Diver.

4. Mallard.
5. Gadwall.

6. Golden Plover.
7. Land-Rail.



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1. Goosander.

2. Pheasant.

3. Stone-Curlew.

4. Dotterel.

5. Garganey.

6. Red-Legged Partridge.

7. Common Partridge.

8. Tufted Duck.

9. Redshank.



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1. Teal.

2. Stock-Dove.

3. Great Crested Grebe.

4. Greenshank.

5. Common Scoter.

6. Woodcock.

7. Common Snipe.

8. Shoveller.

9. Water-Rail.

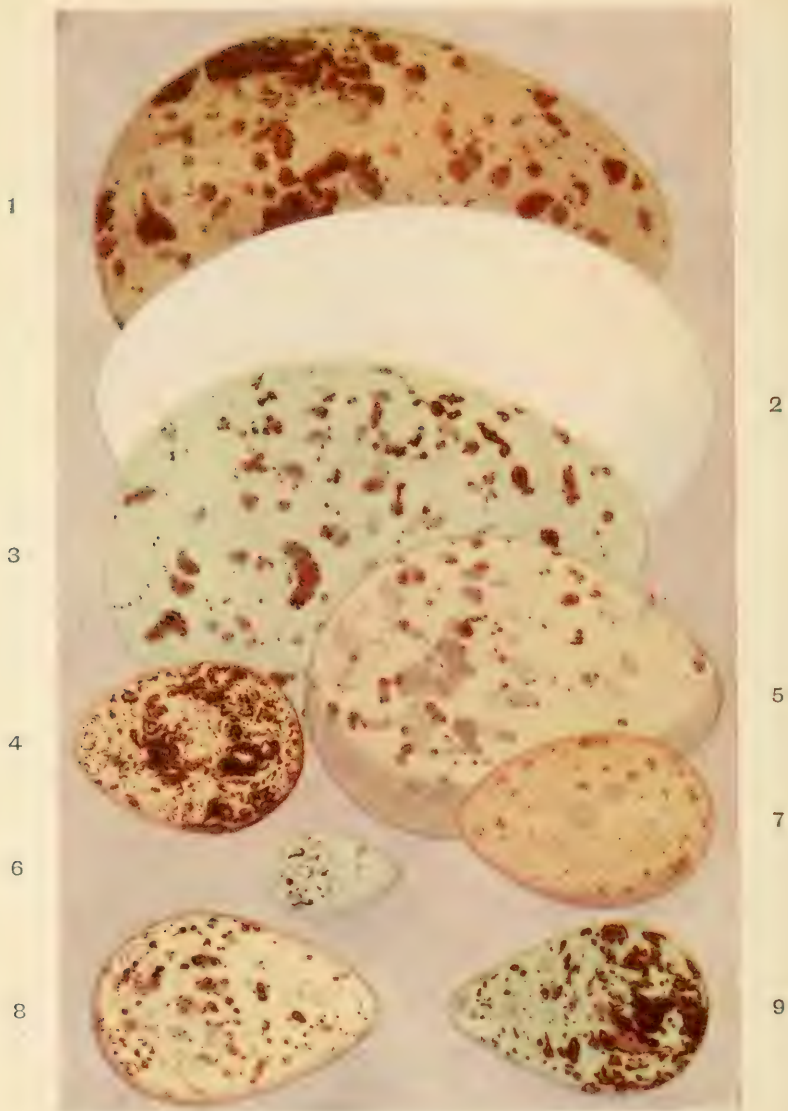
10. Common Tern.



1. Herring Gull.
2. Fulmar.
3. Pochard.

4. Arctic Tern.
5. Sandwich Tern.
6. Little Grebe.

7. Roseate Tern.
8. Red-Necked Phalarope.



1. Great Black-Backed Gull.
2. Gannet.
3. Lesser Black-Backed Gull.

4. Quail.
5. Kittiwake.
6. Goldfinch.

7. Spotted Crake.
8. Common Sandpiper.
9. Dunlin.



1. Great Skua.

2. Jay.

3. Black Guillemot.

4. Common Gull.

5. Richardson's Skua.

6. Capercailzie.

7. Black-Headed Gull.

8. Lesser Tern.

CLASSIFIED LIST OF BIRDS CONTAINED IN THIS BOOK.

Order PASSERES.

| | |
|---|---|
| Missel-Thrush, <i>Turdus viscivorus</i> . | Dipper, <i>Cinclus aquaticus</i> . |
| Song-Thrush, <i>Turdus musicus</i> . | Bearded Titmouse, <i>Panurus biarmicus</i> . |
| Redwing, <i>Turdus iliacus</i> . | Long-Tailed Titmouse, <i>Acredula rosea</i> . |
| Fieldfare, <i>Turdus pilaris</i> . | Great Titmouse, <i>Parus major</i> . |
| Blackbird, <i>Turdus merula</i> . | Coal-Titmouse, <i>Parus britannicus</i> . |
| Ring-Ouzel, <i>Turdus torquatus</i> . | Marsh-Titmouse, <i>Parus palustris</i> . |
| Wheatear, <i>Saxicola œnanthe</i> . | Blue Titmouse, <i>Parus cœruleus</i> . |
| Whinchat, <i>Praticola rubetra</i> . | Crested Titmouse, <i>Parus cristatus</i> . |
| Stonechat, <i>Praticola rubicola</i> . | Nuthatch, <i>Sitta cœsia</i> . |
| Redstart, <i>Ruticilla phœnicurus</i> . | Wren, <i>Troglodytes parvulus</i> . |
| Redbreast, <i>Erithacus rubecula</i> . | White Wagtail, <i>Motacilla alba</i> . |
| Nightingale, <i>Daulias lusciniæ</i> . | Pied Wagtail, <i>Motacilla lugubris</i> . |
| Whitethroat, <i>Sylvia cinerea</i> . | Gray Wagtail, <i>Motacilla melanope</i> . |
| Lesser Whitethroat, <i>Sylvia curruca</i> . | Yellow Wagtail, <i>Motacilla rayii</i> . |
| Blackcap, <i>Sylvia atricapilla</i> . | Meadow-Pipit, <i>Anthus pratensis</i> . |
| Garden-Warbler, <i>Sylvia hortensis</i> . | Tree-Pipit, <i>Anthus trivialis</i> . |
| Dartford Warbler, <i>Melizophilus undatus</i> . | Rock-Pipit, <i>Anthus obscurus</i> . |
| Goldcrest, <i>Regulus cristatus</i> . | Red-Backed Shrike, <i>Lanius colurio</i> . |
| Chiff-Chaff, <i>Phylloscopus rufus</i> . | Spotted Flycatcher, <i>Muscicapa grisola</i> . |
| Willow-Wren, <i>Phylloscopus trochilus</i> . | Pied Flycatcher, <i>Muscicapa atricapilla</i> . |
| Wood-Wren, <i>Phylloscopus sibilatrix</i> . | Swallow, <i>Hirundo rustica</i> . |
| Reed-Warbler, <i>Acrocephalus streperus</i> . | Martin, <i>Chelidon urbica</i> . |
| Sedge - Warbler, <i>Acrocephalus phragmitis</i> . | Sand-Martin, <i>Cotile riparia</i> . |
| Grasshopper-Warbler, <i>Locustella œvia</i> . | Tree-Creeper, <i>Certhia familiaris</i> . |
| Hedge-Sparrow, <i>Accentor modularis</i> . | Goldfinch, <i>Carduelis elegans</i> . |
| | Siskin, <i>Chrysometris spinus</i> . |

| | |
|--|--|
| Greenfinch, <i>Ligurinus chloris</i> . | Cirl-Bunting, <i>Emberiza cirlus</i> . |
| Hawfinch, <i>Coccothraustes vulgaris</i> . | Reed-Bunting, <i>Emberiza schæniclus</i> . |
| House-Sparrow, <i>Passer domesticus</i> . | Snow-Bunting, <i>Plectrophanes nivalis</i> . |
| Tree-Sparrow, <i>Passer montanus</i> . | Starling, <i>Sturnus vulgaris</i> . |
| Chaffinch, <i>Fringilla cælebs</i> . | Chough, <i>Pyrrhocorax graculus</i> . |
| Brambling, <i>Fringilla montifringilla</i> . | Jay, <i>Garrulus glandarius</i> . |
| Linnet, <i>Linota cannabina</i> . | Magpie, <i>Pica rustica</i> . |
| Lesser Redpoll, <i>Linota rufescens</i> . | Jackdaw, <i>Corvus monedula</i> . |
| Twite, <i>Linota flavirostris</i> . | Carrion Crow, <i>Corvus corone</i> . |
| Bullfinch, <i>Pyrrhula europæa</i> . | Hooded Crow, <i>Corvus cornix</i> . |
| Crossbill, <i>Loxia curvirostra</i> . | Rook, <i>Corvus frugilegus</i> . |
| Corn-Bunting, <i>Emberiza miliaria</i> . | Raven, <i>Corvus corax</i> . |
| Yellowhammer, <i>Emberiza citrinella</i> . | Skylark, <i>Alauda arvensis</i> . |
| | Woodlark, <i>Alauda arborea</i> . |

Order PICARIÆ.

| | |
|--|--|
| Swift, <i>Cypselus apus</i> . | Green Woodpecker, <i>Gecinus viridis</i> . |
| Nightjar, <i>Caprimulgus europæus</i> . | Wryneck, <i>Iijnx torquilla</i> . |
| Spotted Woodpecker, <i>Dendrocopopus major</i> . | Kingfisher, <i>Alcedo ispida</i> . |
| Barred Woodpecker, <i>Dendrocopus minor</i> . | Hoopoe, <i>Upupa epops</i> . |
| | Cuckoo, <i>Cuculus canorus</i> . |

Order STRIGES.

| | |
|------------------------------------|---|
| Barn-Owl, <i>Strix flammea</i> . | Short-Eared Owl, <i>Asio brachyotus</i> . |
| Long-Eared Owl, <i>Asio otus</i> . | Tawny Owl, <i>Syrnium aluco</i> . |

Order ACCIPITRES.

| | |
|--|---|
| Hen-Harrier, <i>Circus cyaneus</i> . | Sparrow-Hawk, <i>Accipiter nisus</i> . |
| Montagu's Harrier, <i>Circus cinereus</i> . | Kite, <i>Milvus iclinus</i> . |
| Buzzard, <i>Buteo vulgaris</i> . | Peregrine Falcon, <i>Falco peregrinus</i> . |
| Golden Eagle, <i>Aquila chrysaëtus</i> . | Hobby, <i>Falco subbuteo</i> . |
| White-Tailed Eagle, <i>Haliaëtus albicilla</i> . | Merlin, <i>Falco æsalon</i> . |
| Goshawk, <i>Astur palumbarius</i> . | Kestrel, <i>Tinnunculus alaudarius</i> . |
| | Osprey, <i>Pandion haliaëtus</i> . |

Order STEGANOPODES.

- | | |
|---|-------------------------------|
| Cormorant, <i>Phalacrocorax carbo</i> . | Gannet, <i>Sula bassana</i> . |
| Shag, <i>Phalacrocorax graculus</i> . | |

Order HERODIONES.

- | | |
|-------------------------------|--------------------------------------|
| Heron, <i>Ardea cinerea</i> . | Bittern, <i>Botaurus stellaris</i> . |
|-------------------------------|--------------------------------------|

Order ANSERES.

- | | |
|--|--|
| Gray Lag-Goose, <i>Anser cinereus</i> . | Garganey, <i>Querquedula circia</i> . |
| Bean Goose, <i>Anser segetum</i> . | Common Teal, <i>Querquedula</i> |
| Pink-Footed Goose, <i>Anser brachyrhynchus</i> . | <i>crecca</i> . |
| White-Fronted Goose, <i>Anser albifrons</i> . | Shoveller, <i>Spatula clypeata</i> . |
| Brent Goose, <i>Bernicla brenta</i> . | Tufted Duck, <i>Fuligula cristata</i> . |
| Barnacle Goose, <i>Bernicla leucopsis</i> . | Scaup, <i>Fuligula marila</i> . |
| Mute Swan, <i>Cygnus olor</i> . | Pochard, <i>Fuligula ferina</i> . |
| Whooper Swan, <i>Cygnus musicus</i> . | Golden-Eye, <i>Clangula glaucion</i> . |
| Bewick's Swan, <i>Cygnus bewickii</i> . | Long-Tailed Duck, <i>Harelda glacialis</i> . |
| Common Sheldrake, <i>Tadorna cornuta</i> . | Eider Duck, <i>Somateria mollissima</i> . |
| Wigeon, <i>Mareca penelope</i> . | Common Scoter, <i>Edemia nigra</i> . |
| Pintail, <i>Dafila acuta</i> . | Velvet Scoter, <i>Edemia fusca</i> . |
| Mallard, <i>Anas boscas</i> . | Goosander, <i>Mergus merganser</i> . |
| Gadwall, <i>Chaulelasmus streperus</i> . | Red-Breasted Merganser, <i>Mergus serrator</i> . |
| | Smew, <i>Mergus albellus</i> . |

Order COLUMBÆ.

- | | |
|--|---------------------------------------|
| Wood-Pigeon, <i>Columba palumbus</i> . | Rock-Dove, <i>Columba livia</i> . |
| Stock-Dove, <i>Columba oenas</i> . | Turtle-Dove, <i>Turtur communis</i> . |

Order GALLINÆ.

- | | |
|--|---|
| Pheasant, <i>Phasianus colchicus</i> . | Ptarmigan, <i>Lagopus mutus</i> . |
| Red-Legged Partridge, <i>Caccabis rufa</i> . | Red Grouse, <i>Lagopus scoticus</i> . |
| Partridge, <i>Perdix cinerea</i> . | Black Grouse, <i>Tetrao tetrix</i> . |
| Quail, <i>Coturnix communis</i> . | Capercaillie, <i>Tetrao urogal- lus</i> . |

Order FULICARIÆ.

| | |
|--|---------------------------------------|
| Water-Rail, <i>Rallus aquaticus</i> . | Moorhen, <i>Gallinula chloropus</i> . |
| Spotted Crane, <i>Porzana maruetta</i> . | Coot, <i>Fulica atra</i> . |
| Corn-Crake, <i>Orex pratensis</i> . | |

Order LIMICOLÆ.

| | |
|---|--|
| Stone-Curlew, <i>Edicnemus scolopax</i> . | Woodcock, <i>Scolopax rusticula</i> . |
| Golden Plover, <i>Charadrius pluvialis</i> . | Common Snipe, <i>Gallinago caelettis</i> . |
| Gray Plover, <i>Squatarola helvetica</i> . | Jack Snipe, <i>Limnocryptes gallinula</i> . |
| Kentish Plover, <i>Ægialitis cantiana</i> . | Dunlin, <i>Tringa alpina</i> . |
| Ringed Plover, <i>Ægialitis hiaticula</i> . | Little Stint, <i>Tringa minuta</i> . |
| Dotterel, <i>Eudromias morinellus</i> . | Curlew-Sandpiper, <i>Tringa subarquata</i> . |
| Lapwing, <i>Vanellus vulgaris</i> . | Purple Sandpiper, <i>Tringa striata</i> . |
| Turnstone, <i>Streptilas interpres</i> . | Knot, <i>Tringa canutus</i> . |
| Oyster-Catcher, <i>Haematopus ostralegus</i> . | Sanderling, <i>Calidris arenaria</i> . |
| Avocet, <i>Recurvirostra avocetta</i> . | Common Sandpiper, <i>Tringoides hypoleucus</i> . |
| Black-Winged Stilt, <i>Himantopus candidus</i> . | Green Sandpiper, <i>Helodromus ochropus</i> . |
| Red-Necked Phalarope, <i>Phalaropus hyperboreus</i> . | Redshank, <i>Totanus calidris</i> . |
| Gray Phalarope, <i>Phalaropus fulicarius</i> . | Greenshank, <i>Totanus canescens</i> . |
| | Whimbrel, <i>Numenius phaeopus</i> . |
| | Curlew, <i>Numenius arquata</i> . |

Order GAVIÆ.

| | |
|--|---|
| Arctic Tern, <i>Sterna macrura</i> . | Lesser Black-Backed Gull, <i>Larus fuscus</i> . |
| Common Tern, <i>Sterna fluviatilis</i> . | Great Black-Backed Gull, <i>Larus marinus</i> . |
| Roseate Tern, <i>Sterna dougalli</i> . | Black-Headed Gull, <i>Larus ridibundus</i> . |
| Little Tern, <i>Sterna minuta</i> . | Great Skua, <i>Stercorarius catarrhactes</i> . |
| Sandwich Tern, <i>Sterna cantiaeca</i> . | Richardson's Skua, <i>Stercorarius crepidatus</i> . |
| Black Tern, <i>Hydrochelidon nigra</i> . | |
| Kittiwake, <i>Rissa tridactyla</i> . | |
| Herring Gull, <i>Larus argentatus</i> . | |
| Common Gull, <i>Larus canus</i> . | |

Order TUBINARES.

| | |
|--|---|
| Stormy Petrel, <i>Procellaria pelagica</i> . | Manx Shearwater, <i>Puffinus anglorum</i> . |
| Fulmar, <i>Fulmarus glacialis</i> . | |

Order PYGOPODES.

| | |
|---|--|
| Great Northern Diver, <i>Colymbus glacialis</i> . | Little Grebe, <i>Tachybaptus fluviatilis</i> . |
| Black-Throated Diver, <i>Colymbus arcticus</i> . | Razorbill, <i>Alca torda</i> . |
| Red-Throated Diver, <i>Colymbus septentrionalis</i> . | Common Guillemot, <i>Lomvia troile</i> . |
| Great Crested Grebe, <i>Podiceps cristatus</i> . | Black Guillemot, <i>Uria grylle</i> . |
| | Little Auk, <i>Mergulus alle</i> . |
| | Puffin, <i>Fratercula arctica</i> . |

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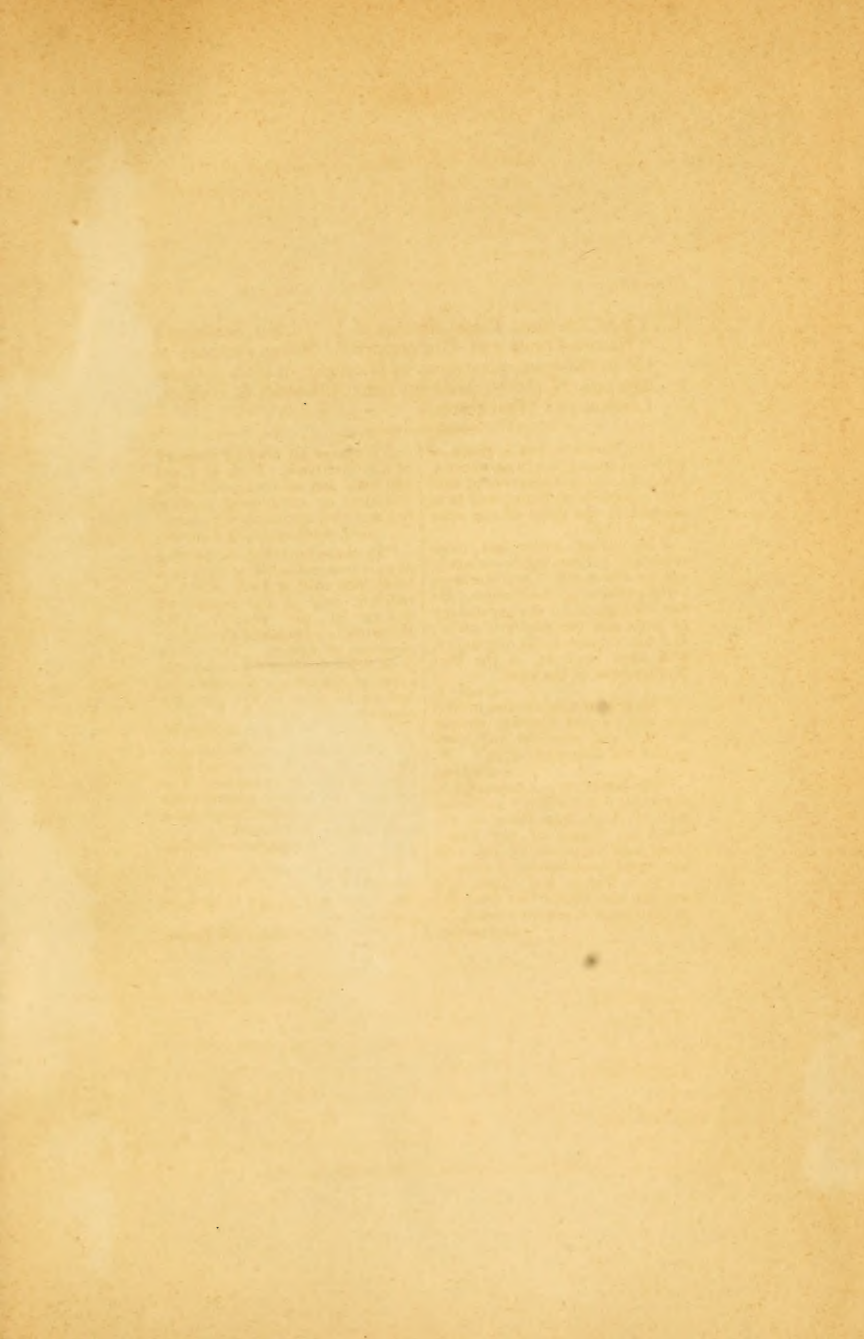
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